Local Perspectives on Valued Learning Outcome and Capability

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Declaration

I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

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ABSTRACT

This research draws on the capability approach to examine the scope for expanding education evaluation beyond its present limitations. Widely used performance indicators of education systems provide policy makers with standardised, aggregated evaluation of national and global system efficiency showing trends over time. Relevance-based, disaggregated evaluation describes local practices, values and perspectives.

The capability approach, by suggesting a means for evaluating negative and positive impacts of learning on the lives of individuals, complements performance and relevance-based approaches. This broadens performance-based evaluation from an economic growth model to conceptualise human development as freedom to do and to be, and provides a framework to structure relevance-based data. Capability-based evaluation focuses on the value perspective of the individual. The range of valued choice for each individual is evaluated, including learning choices which are not taken up. Conversion factors which differently affect each individual's ability to improve her life through learning are identified. Instrumental, intrinsic and positional values of learning are elicited and pathways of learning are described.

The thesis analyses data drawn from focus group discussions with 14 year old children and their parents living in impoverished rural and urban communities in Sri Lanka and Bhutan in 2004. Formal, non-formal and informal learning outcomes of school attenders and non-attenders are analysed to define generic dimensions of learning valued in everyday life, linked to opportunities they have to achieve their aspirations for improved well-being.

The research findings are used to inform an improved indicator framework for the evaluation of learning outcome. The indicator framework focuses on the connectivity between social policy commitment to learning and individual entitlement to learning. The study thus addresses limitations of performance-based and relevance-based approaches by identifying indicators of valued learning outcome and capability across different contexts to evaluate how learning makes a real difference to the future opportunities of children.

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ABBREVIATIONS

ALL	Adult Literacy and Life Skills
ChDI	Child Development Index
CRC	Convention on the Rights of the Child
DeSeCo	Definition and Selection of Competencies Study
EDI	Education Development Index
EFA	Education For All
EPI	Education Performance Index
FYP	Five Year Plan
LEA	Local Education Authority (UK)
MDG	Millennium Development Goals
NFE	Non-Formal Education
NGO	Non-Government Organisation
PISA	Program for International Student Assessment
PIRLS	Progress in Reading Literacy Study
RoVC	Range of Valued Choice
TIMMS	Trends in International Mathematics and Science Study
UPE	Universal Primary Education

GLOSSARY

Agency Freedom: In the context of this study, the opportunity an individual has through preference and choice to learn that which she perceives as of value in enabling her to develop and improve her quality of life.

Capabilities: The substantive freedoms or opportunities one has to choose a life one has reason to value.

Capability-Based Approach: In the context of this study - an approach to the evaluation of learning outcomes which measures human development as enhancement of individual freedoms, considering the influence of social policy and fulfilment of individual entitlement. The capability approach focuses on an evaluative space in which individual perspectives can be considered in relation to development as improvement in the freedom an individual has to live a life they value.

Conversion Factors: The individual way in which each child carries forward the same learning opportunity according to social, personal and environmental differences. The range of factors which, in the context of this study, lead to individual variations in learning outcome ie. individual variations in the shift from commodities (including goods and services – in this case any form of learning opportunity input) to achieved functioning.

Freedom: Freedom in this context implies opportunity for the individual to pursue that which she has reason to value, not merely as individual preference but within a framework that evaluates the effect of actions on the individual.

Functioning: A person's actual achievements, as learning outcomes in this study context.

Individual Entitlement: Individual entitlement to learning is a counter-balance to social policy commitment. The commitment to Education For All, for example, implies an entitlement to learning opportunities for all individuals, including people who lack the basic capability to be educated, and who consequently also lack foundational learning that enhances other basic capabilities.

Instrumental Value: Instrumental value of learning is indicated by external reward, for example where better qualifications lead to better job opportunities.

Intrinsic Value: Intrinsic value is indicated by the individual benefit gained through learning such as a feeling of empowerment when a person realises and exercises their right to participate in local decision-making.

Learning: Used in this study as a broad concept which encompasses both cognitive and non-cognitive acquisition of knowledge and skills, acquired through formal and non-formal learning opportunity, with both negative and positive outcomes. Learning progresses along pathways which are neither linear nor concluded.

Learning Outcomes: A term used in this study to reference individual or group achievements describing the status of actual knowledge or skills acquired on completion of a phase of learning. The actual learning outcomes are the knowledge and skills demonstrated in an examination for example. School enrolment, attendance and completion rates are proxy indicators of learning outcome but they provide no evidence of actual learning achievement. Uncertificated learning outcomes are included in the data

analysis in addition to school learning outcomes describing a broader range of foundational, basic knowledge and skills.

Pathways of Learning / Vectors of Potential Functioning: All the alternative pathways a child can take at any given moment in their learning continuum. Vectors of potential functioning describes a set of capabilities or potential learning pathways. In the specific context of learning outcomes, the capability set would include those learning pathways that lead towards outcomes which the learner values and from which the learner can choose.

Performance-Based Approach: In the context of this study – an approach to the evaluation of learning outcomes that is quantitative, using indicators of education achievement to make comparative and aggregated evaluations of trends and achievements for education system monitoring and accountability.

Positional Value: Positional value of learning relates to the person's self-identity and the position accorded her by society relative to others.

Relevance-Based Approach: In the context of this study – an approach to the evaluation of learning outcomes that is qualitative, making localised evaluations of the trends in learning and cultural change within a specific community.

Social Policy Commitment: The actions which will be taken based on decisions and judgements incorporated into the mainstream, dominant system of education. The social policy commitment of an education service provider reflects, for example, the extent to which Education for All will be achieved. The impact of social policy commitment on individual learning outcomes is one dimension of agency freedom or opportunity for that individual to improve her life through learning.

Chapter 1. Evaluation of Learning Outcomes and Capabilities

INTRODUCTION

Education is a basic human right and an entitlement of all children as embodied in the global commitment to Education For All (EFA) and the Millennium Development Goal (MDG) of access to universal basic education. Evaluation of school performance is used as a key indicator of human development and is widely used as a component in accountability and efficiency of education systems. EFA Goal Six emphasises the need to "Improv(e) all aspects of the quality of education and ensur(e) excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills" (UNESCO, 2004, p. 28, Box 1.1). For policy makers, attention in recent years has been focused on the quantitative aspects of education achievement in the measurable cognitive domains of school learning. This has been driven by the demand for accountability and for standardised evidence of each education system's progress towards the achievement of targets such as those associated with EFA goals and MDGs. These quantitative information systems, though widely used, raise issues of data validity and reliability. Quality in learning outcome and measures of associated improved well-being for individuals is harder to define and evaluate, particularly for those elements of learning which reflect cultural relevance, diversity and values. Learning which contributes to human development is broader and more diverse than school-based learning alone.

The aim of this study is to review critically how learning outcomes are measured and to identify an approach that expands the scope of evaluation of learning achievement beyond its present limitations. The study seeks to evaluate a broad range of learning achievement perceived by individuals as of value and relevant to the local context. Opportunities and constraints may be identified which affect the achievement of learning and its contribution to human development. This local evaluation perspective has the potential to inform the EFA debate by broadening the parameters of what constitutes valued learning and by reviewing the indicators used to measure the impact of learning on the lives of individuals.

Two principles underlying the study must be clarified from the outset. First, it is acknowledged that evaluation of learning outcome ranges across a broad spectrum of methodologies from standardised measurement of performance of education systems to qualitative analysis of individual learning achievement. For the purposes of this study the

polarised extremes, identified in this study as performance-based and relevance-based evaluation, are critiqued in order to draw out their distinctive characteristics. A complementary approach is sought which bridges the two extremes, adding a dimension which evaluates the impact of learning on individual human development. Secondly, in this study the empirical evidence is not used for the purpose of comparative analysis between two country contexts since this may be considered one of the limitations of some existing evaluation approaches. The empirical data is used to generalise issues in the evaluation of learning, highlighting the complexities of multidimensional measurement, grounding the study in particular situations. The generalised indicators of learning outcome which this study seeks to identify are developed to draw out their potential to be used in the evaluation of any valued learning outcome, complementary to existing indicators.

Little is known about which aspects of learning individuals value in terms of added value to their life and life opportunity, what learners think is important for them to learn in terms of usefulness to their everyday lives and to the fulfilment of their aspirations and how this might vary across communities. It may be assumed that individuals would tend to identify as 'valued' those aspects of learning which enable them to function and to improve their situation within their own environment. Furthermore, there is little evaluation evidence to show the influence of social policy on learning outcomes and the corresponding opportunity fulfilment of the entitlement to learning through which individuals can improve their quality of life.

As a means of achieving inclusiveness the evaluation approach must also consider the situation of children who do not attend school, either having never enrolled or having not completed basic education. It was reported by UNESCO that, in 2001, 103 million school-aged children were not in school (UNESCO, 2004, p. 94). According to a broader metric used by UNICEF which counted school-aged and over-age children, an estimated 121 million children were out of school (UNICEF, 2004, p. 7). By evaluating learning opportunities from the learner's perspective and identifying the challenges which she faces, policy makers would be provided with useful alternative information, broader in scope than the present system-level accountability metrics, which would enable more comprehensive planning, monitoring and reporting.

The research topic originated from more than a decade of experience of living and working with people in rural areas of Bhutan and Sri Lanka. It was observed that the self-esteem of many children and adults was low or negative in relation to their perception of

the value and status of their own personal skills and knowledge. This view was particularly prevalent among children and their parents who had either failed to complete basic education or had never had the opportunity to go to school. It was reflected in and reinforced by the value placed on learning outcomes implicit in evaluation methodologies and the dominant norms of education systems. At the same time there was an increasing recognition of the importance of evaluating quality in learning, of equalising opportunity in learning, of recognising diversity and pluralities in society and of the importance of learning in contributing to human development. Measures of human development were beginning to broaden from models of economic growth to encompass social dimensions such as health and education, closely related to poverty reduction as far more than financial well-being alone.

RESEARCH RATIONALE

Children living in rural locations in low income countries face particular vulnerabilities in relation to learning, including limited access to formal learning opportunity and to the enhanced livelihood and economic opportunities which might take them out of poverty. Particular challenges for poorer populations to achieve equality of access to education services include economic barriers to accessing formal education and issues relating to local language and cultural diversity. Indicators such as school enrolment and examination results which are currently used to evaluate education achievement provide little substantive, disaggregated information about diverse groups of learners, their local learning environments and the actual impacts of learning on their quality of life. When characterising and describing the disparities or similarities between communities, there is a danger of over simplifying through aggregation of quantitative data or categorising of qualitative data, overlooking diversity within populations. Conversely there is a danger of over complexity in extreme disaggregation where patterns and trends cannot be identified and where the range of individually valued learning outcome becomes too diverse.

Development in many rural areas of the world is considered to be a challenge for national service providers and policy makers. This relates to economies of scale in providing services to scattered populations, making it less cost effective and more difficult to achieve quality in service provision. 70 percent of the world's poorest people live in rural areas, the majority of whom will remain in rural areas throughout their lives (Atchoarena and Gasperini, 2003, p. 23). Such situations of disadvantage demand specific solutions. While basic education is essential for human development, other learning opportunity is also integral to improvement in the quality of life of individuals. Policy makers have a

social responsibility to seek solutions and to monitor and evaluate the services they provide. The social responsibility of policy makers extends to consideration of social justice and social protection towards the more disadvantaged and vulnerable groups. Social policy will reflect commitments towards individual entitlement and the extent to which policy is equitable. Individuals and communities have a role to play in their own self-development through participation in decision making.

RESEARCH CONTEXT

The study is designed to identify opportunities and vulnerabilities which affect children's learning outcomes and which therefore enhance or restrict the ways in which they are able to improve their lives, drawing on data collected in Bhutan and Sri Lanka. The two contexts of rural Sri Lanka and rural Bhutan were selected to provide opportunities to study the lives and learning opportunities of people in developing countries living in situations of economic and educational disadvantage with limited freedom to move out of poverty. Broad issues will be investigated and generalised to other contexts, for example: the extent to which learning, in its broadest sense, makes a real contribution to the development opportunity of individuals; whether policy makers and planners, as advocates of Education For All agendas, are in communication with these realities and therefore able to evaluate the extent to which learning leads to development of freedoms through which individuals can improve their lives; and the barriers or constraints to improved quality of life through learning, including negative learning outcomes and deprivation of opportunity.

RESEARCH QUESTIONS

The study is concerned with three research questions:

How can evaluation of learning outcome be expanded sufficiently to measure the impact of learning on the lives of individuals?

What lessons can be learned from empirical data on local perspectives of valued learning outcome in contexts of rural poverty to inform an understanding of the influence of social policy on the basic capability of an individual to be educated and to improve her quality of life through learning?

Can an improved indicator framework be developed for the evaluation of learning outcome that goes beyond the limits of existing indicator methodology?

STRUCTURE OF THE THESIS

The study begins in Chapter 2 with a critique of two contrasting approaches to the evaluation of learning outcome: (i) performance-based evaluation which focuses on quantitative global indicators of achievement in formal learning and (ii) relevance-based evaluation which focuses on local qualitative perspectives, broadening to include formal and informal learning contexts relating to change and development. The influences of social policy are considered in relation to each approach. The strengths and weaknesses of each approach are presented and the information gaps identified.

Chapter 3 introduces a capability-based approach as complementary to performance-based and relevance-based evaluation, drawing on several key elements of the Capability Approach (Sen, 1999). First, within the capability approach, development is equated with the expansion of individual freedom. Second, capability, described as the substantive freedom one has to choose a life one has reason to value, places emphasis on the value perspective of the individual. Third, the capability approach makes an important distinction between functionings, which are a person's actual achievements, and capabilities or opportunities one has to improve her life, in this case through learning. Lastly, the capability approach describes an information base which accommodates pluralities so that nothing is ruled out of consideration as irrelevant.

Chapter 4 describes the research methodology used in this study which draws on techniques of grounded theory and naturalistic enquiry. The data collection and data analysis methodologies, the background context of the sample populations and locations, the research tools and the ethical considerations are described. The information is supplemented by annexes of data from the study.

Chapter 5 uses rich description of learning contexts from the case studies of four children from one Bhutanese family to illustrate a range of learning choices and related evaluation of learning outcomes as enhanced or restricted freedoms of the individuals to improve their lives. Formal and informal learning environments are analysed and learning experiences are framed through which to consider implications of participation, social policy, poverty indicators and social change on learning outcomes and development.

Chapter 6 explores case studies of children in Sri Lanka. The ways on which conversion factors (social, personal and environmental) result in different individual learning outcomes are studied. The analysis focuses on learning at the level of basic capabilities and thresholds of learning to draw out issues such as lack of information which restricts

an individuals' freedom to benefit from learning opportunity or lack of functionality where learning is not sustainable if only partial knowledge or skills outcomes are achieved. The case studies are analysed to compare the performance-based, relevance-based and capability-based evaluation perspectives.

Chapter 7 develops insights from the capability approach, analysing the study data in relation to instrumental, intrinsic and positional value of learning from the local and individual perspective of learner aspirations, including both negative and positive outcomes. The impact of social policy on choice and the implications of social policy as influencing individual valuation of different learning choices are also considered.

Chapter 8 attempts to draw up a list of education capabilities applying Robeyns' procedural approach to define lists of capabilities within the context of learning outcome and opportunity (Robeyns, 2003, pp. 70-71). The procedure for defining lists of dimensions of valued learning are compared and contrasted with the procedures for performance-based and relevance-based evaluation methodologies. The resulting lists include examples of specific indicators of learning outcome from which a broad indicator framework may be developed.

Chapter 9 draws together the discussion to analyse the ways in which social policy influences learning outcomes and fulfilment of individual entitlement. The discussion focuses on what an alternative indicator would look like and how social policy should be evaluated. This includes a measure of basic capability as the individual freedom to be educated and the extent to which an individual can exercise self-determination in learning choices within a given social policy context.

Chapter 10 draws conclusions from the study in response to the three research questions stated earlier in this chapter, providing a critical review of the study and a summary of the added value and weaknesses of a capability-based approach to evaluation of learning outcome. The chapter concludes with an indication of future research topics arising from the study.

Chapter 2. Critique of Learning Outcomes Evaluation Methodologies

INTRODUCTION

Evaluation of school learning outcomes has been the focus of increasing attention over the past two decades with changes in methodology from input - output 'production' models of evaluation to measures of performance and indicators of achievement of targets. Inputs are the resources such as per child expenditure and outputs are the related results such that for example an increase in expenditure would be expected to equate to an increase in the number of children passing through the school system. The science of evaluation has been refined and the development of information management systems has enabled more comprehensive scrutiny of data than ever before. At the same time there has been growing concern from international monitors of education performance, for evidence of improved quality, relevance and equity in education, and for data reliability (Molteno et al., 2000; UNESCO, 2004; UNICEF, 2004; World Bank, 2004, p. 162).

Education policy makers and planners are driven by the need for increased accountability and improved standards of performance. This is balanced by a view that diversity and relevance is to be valued and possible adverse effects of globalisation on education, such as 'westernisation', standardisation and degradation of local values should be monitored since 'there are no global solutions' to improving education for children (Molteno et al., 2000, pp. 24-31). Cross cutting these two views is the need to improve quality in education delivery with supporting, substantive evidence that education improves lives (UNESCO, 2004, pp. 28-37). One definition of quality is given as "the desirable characteristics of learners (healthy, motivated students), processes (competent teachers using active pedagogies), content (relevant curricula) and systems (good governance and equitable resource allocation)" (UNESCO, 2004, p. 29).

In addition to cognitive learning achievements, indicators of ways in which education improves the lives of individuals may include "education's role in encouraging learners' creative and emotional development, in supporting objectives of peace, citizenship and security, in promoting equality and in passing global and local cultural values down to future generations" (UNESCO, 2004, p. 29). Macro-level reporting reduces issues of equity to measurement of access or distribution of resources though it is acknowledged that "quality and equity are inextricably linked" (UNESCO, 2004, p. 31). Imbalances in equitable participation in decision making by all key stakeholders are consequently obscured or remain outside the scope of standard evaluation of learning outcome. Where

questions of quality, relevance and equity remain, such as for those living in the extremes of poverty, the realities about the ways in which education can make a difference to people's lives requires study.

This chapter will review and critique two approaches to the evaluation of learning outcomes described in this study as performance-based and relevance-based approaches. Consideration will be given to the extent to which either approach identifies locally valued learning outcomes or factors which enhance or restrict learning, as a means of evaluating learning outcome as improvement in well-being and quality of life for the individual.

TWO EVALUATION METHODOLOGIES

Two broad approaches to education evaluation are drawn from the literature, representing different value perspectives, described here as performance-based and relevance-based approaches.

The performance-based approach is accountability-driven with an overriding concern to provide evidence of achievement against targets for governments and international development agencies (Delens, 1999, pp. 347-370). Efficiency of education systems is measured using performance indicators of school enrolment and completion for example, target setting such as increasing the percentage of children targeted to complete basic education by 2015, and the results from national and international examinations of pupil achievement in core subjects and skills. Performance-based evaluation approaches that use aggregated scores of achievement are underpinned by the view that there is a linear relationship between human resource development and economic growth. Models of human resource development can be used to show the role of education in the reduction of absolute poverty, with refinements which identify variables to explain economic growth and increasing inequality in some countries contrasted with increasing equality in others (McMahon, 1999, p. 112). A narrow range of quantifiable outputs such as number of years of schooling correlated with life-long income, are aggregated to capture indicators of performance as evidence of progress and development (McMahon, 1997).

Performance-based evaluations serve institutional education providers, including public administrators, policy makers and politicians, with accountability mechanisms to inform stakeholders, including citizens and employers. However, the process of performance measurement is "as complex as the many goals societies have for their schools", and

schooling "has multiple outputs that differ in measurability and in the difficulty of attribution" (World Bank, 2004, pp. 119-120). Despite awareness of such complexities, performance-based evaluation is used extensively to compare performance between communities and nations with widely different values and levels of resource capacity (Watkins, 2000). For example, the EFA Development Index compares India, ranked 106, with Nepal, ranked 110[1], where India has a widely diverse population of approximately 1 billion living in relative peace and Nepal has a population of 24 million struggling through a period of political turmoil which directly affects service delivery across many parts of the country (UNESCO, 2004, pp. 244-245). Within both countries there is a wide range of diversity in education outcome and opportunity.

The relevance-based approach is focused at community and individual levels of development set within local cultural contexts. Ethnographic, anthropological and household studies, for example, tend to be designed to reflect features and context rather than for broader generalisability and standardisation, with accountability directed to authentic representation of the specific characteristics and learning aspirations of the community. Attention is focused on impacts of changing patterns of life on learning compared with traditional ways of living, for example, rather than comparison against national or global standards as indicators of development (Filer, 2000). Values held by members of the local community are sought and perspectives which reflect diversity are retained in the analysis, exemplified in collections of relevance-based case studies of development dilemmas in education (Leach and Little, 1999; Levinson, Foley and Holland, 1996; Molteno et al., 2000). Human development is understood, in the context of relevance-based studies, as "a cultural process" in which people participate "in their communities' cultural practices and traditions" (Rogoff, 2003, p. 1). Wenger (2002, p. 6). uses the concept of 'communities of practice' in which learning is understood as "a lived experience of participation in the world" that includes membership of different learning groups. Relevance-based evaluation of learning provides scope for identification of a broad range of factors which contribute to improvement in quality of life. In this sense, unlike performance-based approaches, it is unbounded.

There is evidence that a wide range of factors, broader than school factors alone, impact on children's learning outcomes including (i) social factors: for example family

[1] The EFA Development Index uses standardised performance indicators of net enrolment in primary education, adult literacy rates for the age group 15+ years old, survival rate to grade 5 and the Gender Parity Index (GPI) - UNESCO. (2004), *Education for All: The Quality Imperative*. Paris: UNESCO..

circumstances, cultural values and expectations, participation and democracy (Levinson, Foley and Holland, 1996; Rogoff, 2003); (ii) environmental factors: rural access to quality education, home environment, relevance of learning (Atchoarena and Gasperini, 2003; Dreze and Sen, 2002; Leach and Little, 1999); (iii) personal factors: attitude and disposition to learning generally, physical and mental ability, individual world view (Levinson, Foley and Holland, 1996; Rogoff, 2003); (iv) economic factors: parents employment, household income, livelihood opportunities (McMahon, 1999; Watkins, 2000); and (v) educational factors: parents education, entry and access to next level up (Leach and Little, 1999; McMahon, 1999; Molteno et al., 2000)

Performance-based approaches focus on evaluation of classroom learning in the formal school system. The institutional context, determined by social policy, sets the boundaries of performance-based evaluation where learning is interpreted as "an individual process...[with] a beginning and an end ... separated from the rest of our activities ... [located in classrooms in order that students are] ... free from the distractions of their participation in the outside world" (Wenger, 2002, p. 1).

A broader perspective situates learning in various communities of practice in which learning takes place – at home, in the classroom, at play – with the logic that "much learning takes place without teaching, and indeed much teaching takes place without learning" (Wenger, 2002, p. 6 and 266). Relevance-based evaluation has the scope to include all learning that occurs within local knowledge frameworks in the family and the social group, in addition to school-located learning. Using a general definition of learning as "any experience by which knowledge and skills are acquired that in some way contribute to further understanding or growth by an individual or a community" (Visser and Visser, 2002, p. 3) the diverse range of formal and informal learning pathways and varied content of learning can be identified and prioritised for their applicability and relevance to individuals.

Performance-Based Approaches for Evaluation of Learning Outcomes

The predominant performance-based approaches currently used by planners and policy makers to evaluate education effectiveness fall into three broad categories: (i) national and international level performance indicators (Hutmacher, Cochrane and Bottani, 2001; McMahon, 1997; Taylor Fitz-Gibbon, 1996; Watkins, 2000) that provide national and international performance-based comparison of learning outcome such as enrolment rates, completion rates and indicators of gender parity; (ii) national and international

assessments of education performance (Moskowitz and Stephens, 2004) that apply standardised assessments of performance to make national and international comparison of learner achievement; and (iii) school effectiveness metrics including measures of achievement against set targets such as school performance from examination results (Heneveld and Craig, 1996; Lin Goodwin, 1997).

Each of these approaches uses standardised metrics, based on aggregated data and focused on formal education. The evaluation serves as an accountability mechanism to measure the efficiency of the education system, for example the percentage of children of school going age enrolled in school and the percentage of children who complete basic education in the minimum time period contrasted with the proportion of children who repeat grades or who drop out of school before completing basic education. The purpose of education, in the performance-based context, may be summarised in terms of its contribution to the development of the national economy as growth in human capital and the sharing of common values and national identity throughout the society it serves (Greaney and Kellaghan, 1996, p. 1). This national-level investment in human capital is supported by additional donor-assisted investment in developing countries. Performance-based evaluation can be used to calculate the rate of return from the investment, for example whether a country decides to invest in higher education for a few at a higher unit cost than basic education for all. Cost-benefit analysis of education, valued in economic terms, can be used to correlate additional years of schooling against predicted life-income and other quantitative measures of poverty and inequality related to education (McMahon, 1999, pp. 111-124).

There are several immediate issues to be addressed relating to performance-based approaches as evaluation instruments. First, identification of whose values are reflected in performance-based approaches to the evaluation of learning outcome. Second, which core aspects of learning outcome are evaluated. Third, whether performance based evaluation is an end in itself or whether it has the scope to reveal more about how learning enables the individual to improve the quality of her life.

Performance-based evaluation methodologies, it is argued, are based on a globalised or westernised world view, projecting donor nation values, with little scope to reflect diversity between cultures which might impact on outcomes (Delens, 1999, pp. 347-370). The data collected through performance-based evaluation methodologies is underpinned by dominant political and technical agendas which determine the content and how the results are reported (Greaney and Kellaghan, 1996, p. 50 and 62). Political considerations

are determined by macro-level information needs of social policy and planning. Standard performance indicators of education outcome are formulated on the values of institutions and education systems which vary between cultures and contexts, and over time. In developing countries the values of development partners as providers of aid budgets, including first world governments and financing institutions in their position as powerful stakeholders, are evident in the selection and use of performance-based approaches.

The World Conference on Education for All (EFA), Jomtien 1990 and the World Education Forum, Dakar 2000, set the agenda for targets to be achieved globally as indicators of education achievement. The setting of global targets in the Dakar EFA Framework for Action increased the requirement for each of the 203 participating nations, with a commitment to EFA, to develop and improve systems of education data collection and analysis through which to evaluate and report on education effectiveness based on the criteria of access, quality and relevance (UNESCO, 2004, p. 30).

The range of education development indicators has broadened in recent years from basic analysis of national enrolment statistics to include indicators, for example of gender parity, ethnic and regional disparity and analysis of combinations of factors such as the Education for All Development Index (EDI). The EDI is acknowledged as a proxy indicator of four goals of EFA:

- universal primary education (UPE) using primary education net enrolment figures;
- adult literacy using literacy rates for the 15 years and over age group;
- quality of education using the survival rate to primary grade 5; and
- gender parity taking the average Gender Parity Index (GPI) for primary and secondary gross enrolment and adult literacy (UNESCO, 2004, p. 236).

The increase in sophistication and complexity of evaluation methodologies provides greater insights into certain inequalities, system efficiency, global trends and international comparisons. However, the data remains quantitative, restricted to measurement of performance within formal education systems.

The Global Monitoring Report (UNESCO, 2004, pp. 236-243) provides evidence of positive relationships between learning achievement and survival rate to grade 5, illustrating the enhanced benefits associated with continuation through lower secondary school. Improvements in teacher training and in teacher-pupil ratios are also shown to have a positive effect on learning outcomes. Survival rate to grade 5 is generally used as the most reliable performance-based proxy indicator of learning achievement. The report also discusses some of the issues of data validity and reliability in the calculation of

performance indicators. For example, adult literacy, as a learning outcome, uses methods of self-declaration and third-party reporting of literacy levels, and proxy measures of illiteracy based on the percentage of the population with three years of schooling or less. Improved data standards are anticipated in future following re-definitions of literacy and development of methods to test literacy levels. The Literacy for Life Global Monitoring Report 2006 (UNESCO, 2006) details some current alternative approaches that incorporate direct rather than indirect assessment, using ordinal or continuous scales rather than dichotomies of 'literate' or 'illiterate' and that conceive of literacy as multi-dimensional rather than uni-dimensional. Direct assessment of literacy in this alternative approach typically involves two stages: first skills domains are identified and then skills are categorised into literacy levels (UNESCO, 2006, pp. 180-181).

The Education Performance Index[2] (EPI), developed by OXFAM between 1998 and 2000, sought a means of addressing the global 'education crisis' through more accurate and informative global reporting on education performance. The education crisis can be measured quantitatively, for example it is estimated that one sixth of the world's population are functionally illiterate, one in five school aged children in developing countries would not have attended school in 2000, the year of reporting, and more than one fifth of school aged children would drop out of school in the same year before they had acquired basic skills of literacy and numeracy (Watkins, 2000, p. 7). EPI combines three indicators from the formal education system to capture the extent of education inequality: net enrolment of children aged between 6 and 11 years old, completion rate to Grade 4 and ratio of female to male enrolment. EPI integrates these three basic indicators to overcome the weakness identified in standard reporting systems in which each indicator "is treated in isolation, which can create a misleading picture of overall performance" (Watkins, 2000, pp. 135-136). Watkins acknowledges that the EPI does not capture some important aspects of education performance such as gender discrimination and gender bias in education materials, or quality of education, and that enrolment rates are only a proxy for school attendance. Learning outcomes are not captured beyond stating whether and how far a child passed through the system. This represents the production input-output model and little can therefore be stated directly about actual learning outcomes or impact of learning (positive or negative) on improvement in an

[2] EPI "brings together a composite index a range of features of deprivation in educational attainment, to arrive at an aggregate judgement on how countries are performing in relation to each other" including "an extreme deprivation line ..... representing a threshold where on average more than one third of children were out of school, fewer than one-third were completing school, and the gender gap in enrolment exceeded 33 per cent" Watkins, K. (2000), *The OXFAM Education Report*. Oxford: OXFAM..

individual's quality of life.

While the use of indicators provides benchmarks of achievement for national policy makers and international development strategists, other limitations are identified in the use of indicators, concerning questions of reliability and validity. The validity of learning outcome indicators of formal education systems is called into question when diversity and equity in learning opportunity is to be differentiated in the evaluation, for example in the case of children learning in other than their home language, in cultures where academic competition is not encouraged or where diverse cultural characteristics of child discipline exist which reflect alternative values. Cavicchioni and Motivans (2001, pp. 226-235) present a range of equity indicators in education including access for girls, household socio-economic status, parental background and enrolment-dropout patterns, drawing on cross-national comparison and in-depth household survey research. They conclude that development of cross-national indicators of learning outcomes is, in their view, "predicated by the availability of administrative data" and "international standardisation is still elusive" (Cavicchioni and Motivans, 2001, p. 222). It is suggested that the two performance-based approaches of cross-national comparison and in-depth national analysis are essentially incomparable due to lack of international standardisation of conceptual definition of variables, failure to identify special learner groups and problems of reliability and validity of data collection processes. The implication is that there is not one approach which can serve both micro and macro level analysis of learning outcomes.

Booth and Lucas (2002) undertook a critical review of poverty monitoring strategies and final and intermediate outcome measurements of poverty reduction strategies in developing country contexts. Poverty reduction strategies include a focus on education, based on a proposition such as that comprehensively tested by McMahon (1999, p. 7) that "education contributes to economic productivity, has a central role in diffusing knowledge which is vital to the growth process, and is an important force for broader economic development". The Booth and Lucas study identifies some limitations in the use of indicators for outcomes measurement, four of which are directly applicable to indicators of learning opportunities and outcomes.

Firstly, the reliability of source and quality of most frequently available data is problematic. National statistical data sources generally cannot cope with reliable, timely and affordable dissagregated data. "The poorest areas typically have the least reliable data." (Booth and Lucas, 2002, p. 17). Some specific issues are that quality of data may vary between regions and countries, that national estimates are often based on partial

coverage, that data based on estimates and partial coverage may be 'grossed up', and that base population figures, including age-specific population estimates, may vary between sources leading to the 'denominator problem' ie lack of consensus as to which base figure is the most reliable and valid. The management of information involving shifting populations from employment-related migration for example, can have a substantial effect on performance indicators such as enrolment, dropout and completion rates.

The basic requirements for reliable evaluation are efficient audit systems and quality assurance measures such as checks on source and accuracy of information reported, to ensure quality and reliability of data. Audit and quality assurance systems are likely to be weak or lacking in less developed countries (Birdsall, Levine and Ibrahim, 2005, p. 93; Riley and MacBeath, 2000). Watkins (2000, p. 76) points out that it is impossible to answer the basic question of how many children are not in school with any certainty and that this has particular implications for financing and planning of education to meet the needs of disadvantaged social groups representing the least reliable information. Education systems may be stretched beyond the skill and resource capacity of the personnel, with competing priorities and externally-driven demands for accountability.

Secondly, Booth and Lucas observe a lack of community involvement in defining the list of proposed indicators and in identification of factors relating to failure or potential failure of projects. The question to be asked of the beneficiaries is "how can project success and failure be measured?" In the case of learning outcomes, the indicators are generally based on values of the education system, determined by the purpose of education – in this case the question should be asked of the learners (and in the case of children, additionally their parents), "how would you measure success and failure in learning outcomes?". Community involvement may generate more locally relevant indicators which reflect diversity and, where school systems "fail", would also provide reasons from the local perspective. For example, a child who "fails" to complete basic education but is knowledgeably skilled and successful in a locally relevant capacity may provide alternative and equally valid indicators of informal learning outcomes.

Thirdly, indicators tend to be used for analysis by sector rather than by target group. In the case of Poverty Reduction Strategy evaluation the following question is raised - "Would it be useful to classify indicators by target group rather than by project or programme area, bringing together all those economic, health, education, etc. indicators relevant to that group?" (Booth and Lucas, 2002, p. 18). The combining of basic

education and rural development initiatives presents a parallel case to that of Poverty Reduction where evaluation would focus on cross-sectoral integration of public policies, but in practice division of responsibility between ministries works against this ideal (Atchoarena and Gasperini, 2003, p. 54).

Fourthly, causal links between indicators and final outcomes are not considered in the evaluation process, thus overlooking the information to be gained from intermediate output and outcome measures. This last point in the Booth and Lucas analysis emphasises the 'missing middle' in which monitoring and evaluation processes fail to detect critical changes as they occur. In performance-based evaluation the "missing middle" could be the difference between enrolment figures, actual school attendance and learning outcome, or teacher pupil ratio and actual teacher attendance, or test results compared to the actual taught curriculum and to actual skills and knowledge not assessed. Each set of performance-based indicators would provide critical additional information to explain situations where, for example, completion pass marks show a 50% or higher failure rate for children as an outcome of 9 years of formal education (Cavicchioni and Motivans, 2001, p. 235).

A technical World Bank review, critiquing estimates of global poverty presented in World Development Reports 1990 and 2000/01, identifies "incorrect extrapolation from limited data, creating an appearance of precision" (Reddy and Pogge, 2003, p. 4) - a basic flaw in the analysis of poverty data, which resonates with similar issues in the evaluation of basic learning outcomes. Education indicators can be considered as only weak proxies of progress towards achievement of learning targets. For example, while net enrolment rates (the ratio of children enrolled within the primary-school age cohort) are "notoriously unreliable ... and should be treated as indicative" (Watkins, 2000, p. 75), they also obscure information on relevance and practical application of learning to real life. 'Years of schooling' used as a proxy indicator of learning experience must be recognised as limited data, providing no information on either quality or relevance of the actual learning experience. Noel and de Broucker (2001, p. 286) use the term 'density of the experience' as a descriptive qualifier to re-define years of schooling. They suggest that, in purely quantitative terms the number of days per year and hours per day of actual school attendance would be more accurate than number of grades completed. This is one small step closer to qualitative description of quality and relevance of the actual learning experience and indication of effect on individual lives.

A comprehensive study using endogenous growth projections of education outcomes

(McMahon, 1999) provides a scientifically aggregated overview of the impact of formal education on selected performance-based indicators of quality of life, showing trends and projections across a range of developed and developing countries. The study simulates a performance-based approach to evaluation of learning outcome which seeks to measure the total social benefits of education by examining the direct and indirect effects of education on market and non-market outcomes projected over a 40 year future time period. Direct effects of education (a skilled labour force leads to increased productivity) and indirect effects "such as those on the environment (via poverty reduction, etc) or on greater political stability (via democratisation), all after long delays" are calculated (McMahon, 1999, p. 6).

Detailed analysis of interactions between variables presented in the McMahon study is unable to reflect on and explain diversity at a level lower than between-country and between-category comparison. The perspective is firmly grounded in the information from international data sources, primarily from the World Bank and UNDP, which therefore reflects those institutional values. McMahon acknowledges that "the range or relative magnitude and direction for each effect cannot be shown" and that "these effects do not follow smooth continuous trends". (McMahon, 1999, p. 180). Negative trends or regressions are 'smoothed out' over the course of time. In discussing 'benefits', McMahon states "the term 'benefits' is used here to mean net benefits, since there can be some negative social costs. Most of these negative effects are smaller and net out as the regressions are run. If net negative effects still persist, most of these are cancelled out by other positive effects in the feedback process as simulations are run" (McMahon, 1999, p. 228). What this study fails to note is that individuals bear the negative social costs and that inequitable distribution of social costs may be significant at micro level for individuals living in contexts of poverty. Macro-level analysis of performance loses important information on actual impacts of development as they affect individuals.

In summary, national and international performance-based indicators attempt to present valid evidence, used by policy makers for system accountability and mapping of trends in education achievement, based on aggregated proxy indicators. Performance-based indicators do not provide a measure of the extent to which learning outcomes valued by individuals are achieved. Neither do they show the extent to which learning actually improves the lives of individuals. This also includes a failure to measure ways in which the outcomes of learning include negative outcomes and deprivation of learning opportunity. Dominant system values are used as the yardstick rather than local or individual values and the achievements of those outside the mainstream remain

unaccounted.

Another widely used performance-based approach to evaluation of learning outcomes is the use of national and international standardised assessment tests which make within and between-country comparisons of learning outcome based on aggregated scores of school learning competencies. They serve the purpose of system-level monitoring and benchmarking, of political, public and economic importance. At the present stage of development, national and international assessments are not reliable sources of information for school level diagnostic use, which "makes the results of the assessment seem less relevant to actual practitioners" (Moskowitz and Stephens, 2004, p. 216). The assessment methodologies and content are developed by members of the research community. They require all participating countries to follow similar procedures and use the same instruments of assessment (Greaney and Kellaghan, 1996, p. 12). Points of reference for objective performance-based comparison between populations and domains of learning can be rigorously validated, but standardised assessments take little account of difference factors between sample populations, including local perspectives of what is valued and how learning is therefore assessed. The concern then, is whether differences in baseline social, economic, environmental, historical and cultural factors (inputs) which influence differences in learner performance (outcomes) are reflected in the narrow band of standardised cognitive skills and knowledge assessed and whether there is justification that the focus of learning assessment should be broadened.

The World Declaration on Education for All (1990) prompted a "widespread recognition that information on the actual learning of students, or outcomes, to supplement traditionally gathered information on the inputs to education was of vital importance to understanding and improving education systems" (Owen et al., 2004, p. 10) The increase, during the 1990's, in performance-based evaluation for comparison of national and international education achievements is attributed primarily to the need to show "what students and citizens know and can do … for competing in the global economy" (Moskowitz and Stephens, 2004, p. 1). Aggregated national and international ranking and publication of performance results by governments, international agencies and the media focuses attention on failure and success in education learning outcomes drawn from a series of international studies (Owen et al., 2004, pp. 5-6) including Trends in International Mathematics and Science Study 1995, 1999 and 2003 (International Study Centre, 2003), the Programme for International Student Assessment 2000 and 2003 (OECD, 2003), the Progress in Reading Literacy Study 2001 (International Study Centre, 2001), and the Adult Literacy and Lifeskills 2003-05 (National Centre for Education

Statistics Institute of Education Sciences, 2003).

Originally designed as research tools , these assessment methodologies have become increasingly policy oriented, used as proxies for accountability of quality and standards by Ministries of Education and international agencies (Owen et al., 2004, p. 10). Critics of international comparative evaluation methodologies challenge the construct validity (testing achievement attributable to education experience), the content validity (whether the tests are measuring the domains they claim to measure), comparability of student populations, the degree of bias from cultural differences and whether the methodologies enable generalisability beyond that which has been specifically evaluated (Owen et al., 2004, p. 16). Issues of local relevance and learner context are raised in the use of standardised measures of learning outcome, in which elements of diversity are lost through processes of data aggregation.

The differences in education systems (capacities, stage of development, resource levels, ideologies), actual levels of attainment and competency of learners, and relevance of learning to the lives of learners remain obscured in standardised, international comparative studies. For example, social policy and institutional differences between education systems that will impact on student learning outcomes in standardised performance-based assessment remain under-exposed.

It is even more difficult to measure broader non-cognitive learning outcomes, for example assessment of life skills. "Compared with cognitive development, the extent to which they (non-cognitive skills) are achieved is harder to determine." (UNESCO, 2004, p. 29). The OECD has invested much effort into defining and identifying key learning competencies which are broad in nature and internationally applicable. The Definition and Selection of Competencies (DeSeCo) study addressed questions such as 'what constitutes a successful life?' and 'how the values of diverse societies can be accommodated in the conceptualisation of key competencies'. (Rychen and Salganik, 2001, p. 22).

A key outcome of the DeSeCo study is an international competence-based assessment framework which is not structured or specifically focused on formal school learning outcomes. Basic principles of human rights, democratic values and sustainable development are used as anchor points for the selection of the key competencies. Within this framework standardisation and diversity are both addressed by acknowledging that general level competency assessment will vary in relative importance depending on

cultural and socio-economic factors. Three broad categories of competence are identified that are demand-oriented, ie driven by self-motivation of the learner as demonstrated through personal action, considered vital to successful lives and well functioning societies: (Rychen and Salganik, 2001, pp. 21-26):

(i) acting autonomously

(ii) using tools interactively

(iii) functioning in socially heterogeneous groups

These categories are generically applicable to any learning outcomes.

The DeSeCo study highlights how difficult it is to define and select key qualitative aspects of children's learning, even in finding agreement across disciplines. While the key competencies have been broadly defined, driven by specialist researchers within a theoretically oriented and policy-driven approach to the problem, the process of developing assessment strategies is on-going. The study proposes that scales of mastery for each skill area be identified in the development of assessment strategies, including minimum levels to be achieved for each student, connecting school learning and lifelong learning (Rychen and Salganik, 2001, p. 76).

In summary, national and international assessment metrics are based on standardised formulae which focus on norm-referenced measures of similarity between groups and which factor out elements of diversity. Dominant national and international value systems are used whereas local perspectives of valued learning which may lie outside the cognitive domain of school learning are not measured. Consequently no account can be taken of broader learning achievement which may be of direct benefit in improving lives. Questions of generalisability and validity remain a challenge especially for international comparison.

Schools in many countries are increasingly under pressures of accountability in which they must demonstrate their effectiveness against performance-based evaluation of learning outcomes. Processes of decentralisation of management responsibilities and demand for improvements in quality of education provision in the past decade have led to an increase in performance-based evaluation and reporting at school level. Dominant social values differ between learner groups, suggesting a need to consider the extent to which evaluation methodologies may be decentralised to reflect local values. Measures of learning outcome at the school level range from norm-referenced formal assessment in cognitive domains of learning (comparison against performance of other individuals) to criterion-referenced evaluation of each child's individual progress (comparison against

levels of competency). The choice of assessment focus is a reflection of social values.

Measures include performance against targets, performance in assessment and examinations, and performance against school effectiveness indicators. UK school effectiveness indicators include league tables of ranked school, district and national performance in relation to examination results, and 'value-added' indicators as a measure of the direct benefit of school attendance on an individual child's school performance. Exam performance is compared at the start and end of a period of schooling using a median figure (middle point of the range) for pupils' progress across the country. A school's 'valued-added' score is the difference between the average progress of pupils at a school and the median figure.

League tables, including value-added indicators, have been published annually since 2000 for all schools in England, in the annual Governing Body report to parents. The value added to a child's education by school attendance is calculated by comparing a pupil's results with previous achievements (Brooks, 2002, p. 150). Its validity was questioned as too simplistic to take account of socio-economic background and other factors which might account for a change in individual performance. The calculation of added value in school league tables now factors in the socio-economic background of the child including gender, SEN, mobility, and levels of deprivation. The rationale acknowledges that such factors impact on pupil results but the output is aggregated into a single measure used to compare schools against a national average (DFES, 2007). This endorses the view that "numbers have become the currency of education" – all targets are quantitative - and that "league tables encourage a skewing of school resources to concentrate on a select group", with a consequent unmeasured effect on individual learning outcomes (Brooks, 2002, p. 146).

In a study of school systems in Togo, Kudjoh and Mingat (1993, p. 149) highlight several methodological issues in analysis of education phenomena by governments and international agencies: lack of transparency due to effects of numerous internal variables (eg. class size) and external variables (eg. pupil characteristics); time dependence of school learning outcomes; lack of agreement by educators on effective teaching and learning strategies; and lack of control mechanisms for comparative evaluations. They discuss the complexities of measuring learning outcomes including the need to use multivariate analysis as one method to identify key factors in learning. Education as a process of transformation with varying external influences affecting the learning process over time must also be considered in the evaluation methodology. The study suggests one

strategy which can address these issues is to take an initial reference point and measure change using a value-added model (Kudjoh and Mingat, 1993, p. 147). In this case a change score can be generated over a defined time period. However, the difference in a child's performance is a measure of the characteristics of the learning situation during that period including the effects of other unaccounted variables. While the focus is given to added value, it does not seek to identify negative learning outcomes, for example why some children do not achieve, and it does not take the next step towards analysis of how the learning outcomes enhance or restrict a child's future choices.

Target setting is used to measure performance at each level in the UK education system forming an 'interconnected chain of accountability' from monitoring of pupil achievement through to the setting of government targets (Brooks, 2002, p. 144). Two weaknesses in the system are identified by Brooks. First is the fragmentation in the chain of target setting because of accountability and communication between different stakeholders. At the national level information is aggregated from achievement of targets set at teacher, school and LEA levels. If targets are set only for the purposes of upward reporting one must question whether they serve any purpose down the chain in evaluation of actual student outcomes and whether this could also include evaluation of negative learning outcomes. More recent developments in the reporting procedure have increased accountability through for example the requirement for performance-based summaries of achievements against targets in annual governors reports to parents. Secondly, Brooks argues that a norm-referenced approach, used to encourage children to compare themselves with one another, could be "a fundamental weakness in this school improvement initiative" if used for ranking and selection purposes (Brooks, 2002, p. 141). The case may be made for criterion-referenced target setting in which the individual child strives to improve her own performance compared to her earlier achievement rather than compared to that of her peers.

The target setting model applies to a closed institutional system in which the boundaries are clearly defined and the measured outcomes are those which fall within the boundaries of the school system and the assessment system. It does not seek to evaluate learning outcomes as they affect the life of an individual outside these boundaries. The assumption is that school learning outcomes are sufficient indicators of ways in which learning will improve lives since the use of prior attainment as "the key determinant of future performance" can be statistically justified (Brooks, 2002, p. 150).

A comment on the USA system of performance-based evaluation of school effectiveness provides a perspective on the injustice of standard assessment methodologies: "Educational focus on competitive school ranking based on standardised tests blurs both a commitment to equal educational opportunity and an honest appraisal of discriminatory school practice" (Fennimore, 1997, p. 243). Fennimore raises issues of equity and factors relating to school failure in which the blame for low student achievement is passed down to children, families and communities. She pin-points two factors both of which are system performance failures, (i) stigmatisation through labelling within the categories of failure and (ii) educational ineffectiveness (Fennimore, 1997, p. 244). In this view educational testing does not contribute to meeting the needs of all children but rather it categorises some children as failures of the system.

The use of school assessment in the evaluation of learning outcomes needs to take into account the backwash effect for the negative impact it can have on what is learned and what is evaluated as learning outcomes. Backwash effect is evidenced by the generalisation that "What is tested is what is taught and what is not tested will not be taught" (Greaney and Kellaghan, 1996, p. 8). Goldstein, in a critique of target setting in the Education for All initiative makes a similar point "concerned with the distorting effects that 'high stakes' target setting can lead to, by encouraging individuals to adapt their behaviour in order to maximise perceived rewards; viewed as a rational response to external pressures" (Goldstein, 2004, p. 7). Goldstein makes the point that "any rise in test scores should not be confused with a rise in learning achievement as opposed to test taking performance" (Goldstein, 2004, p. 9). One solution proposed by Goldstein suggests that different countries need to develop different criteria for assessment, replacing target setting with an understanding of the dynamics of each education system, including monitoring of learning outcomes targets referenced in EFA Goal 6 focused on achievement of literacy, numeracy and essential life skills learning outcomes that are recognised and measurable for all children. (UNESCO, 2004, p. 28). "The emphasis would be on the local context and culture, within which those with local knowledge can construct their own aims rather than rely upon common yardsticks implemented from a global perspective" (Goldstein, 2004, p. 12).

Historical and sociological perspectives show that contemporary assessment techniques have developed in parallel with industrial and technological developments, which can be demonstrated to influence social roles through competition, selection, certification and control (Broadfoot, 1996, p. 10). Broadfoot presents a comprehensive study of the development of assessment of learning outcomes from pre-industrial through to modern-

day society, which may be comparable to differences which still exist between rural communities that are under-developed and urban communities that are comparatively more technologically-advanced. At one extreme Broadfoot refers to 'simple' societies in which "assessment is largely determined by the competencies required" with "little discussion about the desirable content" of what is to be learned and "little need to discriminate between members of the society" in terms of competence and mastery. In contrast, in 'complex' societies "basic competencies may be comparatively insignificant compared to other criteria which define more specialised competencies" (Broadfoot, 1996, pp. 27-28). Broadfoot's analysis implies that one standardised model of performance-based evaluation cannot be equally applied and will not be equally relevant to both 'complex' societies and 'simple' societies.

The socio-cultural perspective is further exemplified in a series of critiques of assessment of learning from a social theory perspective (Filer, 2000). A conflict of interest is identified between the narrow performance-based orientation of current assessment discourse built upon short term indicators of achievement contrasted with advocacy for life-long learning within a learning society. "The more marginalised and silenced are the voices who would articulate, given the social space to do so, a different vision of quality in education, of the pedagogical conditions which make it possible" (Broadfoot and Pollard, 2000, pp. 22-24). Berlak (2000, p. 193) makes a simplistic yet significant comparison between the standardised assessment score for two children from extremely different social and economic backgrounds. The proposition that the same score on a standardised reading test is "more or less equivalent in terms of educational productivity ... is clearly untenable". These examples highlight a weakness where, being time-bound to certain arbitrary points in the learning continuum, performance-based evaluation cannot account for local perspectives reflecting diversity and progression of learning.

In summary, performance-based evaluation of learning outcomes provides evidence of school effectiveness, quality assurance and efficiency of the system but is not able to report broadly on children's learning achievement drawn from local value perspectives. Neither is it able to move beyond evaluation of learning as an end in itself to evaluate how learning enables or disables individuals from improving their lives. While performance-based approaches are an essential element of macro-level evaluation of human development, the weaknesses identified in this review indicate the need for supportive and complementary evidence from other broader perspectives. Standardisation enables comparison between groups but alternative approaches are required to highlight factors which are non-comparable, for example the learning outcomes of children from

extremely different socio-cultural backgrounds and non-cognitive aspects of learning. The process of aggregation of data allows for observation of general trends but distributed inequalities are smoothed out and negative learning outcomes are obscured within the overall view. Quantitative data presents a false impression of precision where ambiguities of conceptual definition, reliability and validity exist.

Relevance-Based Approaches for Evaluation of Learning Outcomes

Relevance-based approaches provide local perspectives on learner outcomes using a variety of methodologies such as ethnographic case studies, household living standards surveys and poverty surveys. The approaches focus on gaining understanding of social systems and social organisation as a means to explain qualitative aspects of human behaviour and human development in contrast to quantitative performance-based evaluation methodologies. Disaggregated, non-standardised qualitative data covers a broad range of context-specific factors which describe the learners' environment, not limited to formal education. The relevance-based approach to learning would describe the purpose of education as reflecting and reinforcing the local culture, inclusive of formal and informal learning. These context specific parameters define the qualitative focus of relevance-based evaluation.

The criteria to be used in judging validity of qualitative research is well-documented (Mertens, 2005, pp. 253-259) and is paralleled with standard quantitative criteria such that credibility is equivalent to internal validity, transferability to external validity, dependability to reliability and confirmability to objectivity, respectively. Mertens provides a comprehensive explanation of a list of qualitative research criteria originating from the work of Lincoln. Several criteria are characteristic of relevance-based anthropological and ethnographic study. Prolonged substantial engagement and persistent observation provides credibility or internal validity and thick description of multiple cases provides transferability or external validity. Other criteria such as positionality, attention to voice and critical reflectivity suggest a requirement for participatory engagement with informants. These criteria differ from the general characteristics of performance-based study conducted from a position of external objectivity, though both approaches require an audit of data to confirm authenticity.

Learning outcomes can be analysed through the study of qualitative data using a broad interpretation of learning, including life and livelihood skills and the impacts of learning on the traditions and life styles of the community. "Pre-occupied with schooling, most

research on human learning is focused on learning that depends on teaching or is completed in a specified context rather than on learning that takes place spontaneously because it fits directly into life" (Bateson, 1994) cited in (Lawrence and Tate, 1997, p. 10). Unlike performance-based evaluation of school learning, relevance-based evaluation of spontaneous or contextualised learning cannot be standardised, does not serve the purpose of service provider accountability, and does not provide norm-referenced data for comparison between populations. However, relevance-based evaluation of learning outcomes at local levels can provide information on factors which enhance or restrict learning as a means of evaluating improvement in well-being, especially for those learners from the poorest communities who are least likely to access secondary education and therefore do not register on standard performance-based metrics.

An aim of relevance-based approaches is to gain insight into the local dynamics of development, for example the effects of change in local patterns of learning with the construction of a village school (Rival, 1996). Ethnographic and anthropological studies aim to describe particular situations, such as intergenerational transfer of local indigenous knowledge and skills, without necessarily having any concern for comparison or generalisation between populations (Aikman, 1999; Visser and Visser, 2002). Household surveys, while similarly focussed at micro-level, tend to be used for local poverty needs assessment and intervention planning, including qualitative and quantitative data, for example highest level of qualification in the household, number of school-aged children per household attending/not attending school and reasons for non-attendance (Royal Government of Bhutan National Statistical Bureau, 2003; Royal Government of Bhutan National Statistical Bureau, 2004). In the relevance-based evaluation context development can include change in economic, social, personal and environmental status, not necessarily following a stereotypical path towards modernisation.

Contrasting perspectives and variations in definitions of relevance can be identified, relating to the purpose of education. For example, education can be used as a focal point for cultural transmission, including religious tradition, or it can place emphasis on liberal emancipation enabling individuals to exercise skills of critical thinking and personal autonomy, or the main purpose could be to bring about improvement in the lives of individuals and consequently in the community (Woods, 2005, p. 84). Whether the evaluation is focused on formal school learning outcomes or informal community and home learning situations, the judgement of relevance of learning outcomes will inevitably reflect the defined purpose of education and learning. Learning considered of relevance by the community religious leader or village headman might be measured in relation to

conformity with moral norms including dress code and behaviour towards elders. The village health worker or agriculture extension worker supporting a remote community of unschooled subsistence rural farmers might value learning which is of relevance to sustainable development, modernisation and change whereas the traditionalist village elder or practitioner of local indigenous knowledge might hold a very different view. Perceptions of relevance and value will consequently vary between education providers, parents and community leaders, learners and evaluators, and will vary over time and from place to place (Levinson, Foley and Holland, 1996; Molteno et al., 2000).

Local perspectives of learning raise issues of commonality in cultural values within the community and within the formal school system. Variations between communities in the meaning of literacy, life skills and skills for survival require consideration, as do differences in conceptual understanding of child development applied in practice (Levinson, Foley and Holland, 1996; Rogoff, 2003). Of interest is the local perception of valued learning, ways in which children learn through local knowledge frameworks, how this learning contributes to improved well-being, and how this learning achievement is acknowledged and evaluated.

Consideration of relevance of learning to local contexts is central to a range of recent studies of children's learning outcome including school-focused studies (Atchoarena and Gasperini, 2003; Molteno et al., 2000) and indigenous community based learning (Levinson, Foley and Holland, 1996; May, 1999; Rogoff, 2003). Child-centred teaching and learning methodology is an approach advocated in current development interventions which are relevance-based in principle (Molteno et al., 2000, pp. 53-56). If applied in practice, it would incorporate valued learning based upon local knowledge frameworks, with non-standardised participatory evaluation of learning outcomes sensitised to the local context.

A collection of qualitative case studies (Molteno et al., 2000) emphasise the importance of recognising and utilising the local context of the learner, bringing community relevance into or closer to the school learning environment. All key stakeholder perspectives are considered including international partners, local communities, parents and children. Though children have not traditionally been consulted in evaluation of learning outcomes, evidence from such studies shows that inclusion of perspectives of children in the evaluation process can provide fresh insights into teaching and learning, identifying problems and offering solutions as well as being open to addressing more contentious issues such as education and HIV/AIDS from the perspectives of children

(Molteno et al., 2000, p. 222). The case studies illustrate numerous examples in which the formal learning situation is ideally supported by community participation, parents involvement in school, relevant curriculum and tests which reflect what has been taught, use of local language and locally available teaching materials, which expands the local knowledge framework and widens the local knowledge network (Molteno et al., 2000, pp. 54-56). In the performance-based model of evaluation by contrast, the learner is generally the passive respondent in a de-contextualised system where local knowledge frameworks may not be accommodated.

The transmission of valued knowledge and skills within families is a generic dimension of learning outcome which impacts on the learner differently across societies. Changing roles of family and community members in the learning processes of young children is an aspect of development which relates to choice and individual freedom. In a study of cultural change in West Africa, Nsamenang (1992) cited in (Rogoff, 2003, pp. 337-338) observed that education through school attendance did not necessarily lead to improved economic well-being and individual freedom. In the case of marginalised and disempowered communities several negative outcomes were reported. Families became physically divided so that children could attend school, unschooled parents expressed a feeling of inferiority beside their educated children, and relationships between parents and children had shifted so that the child was considered to be more knowledgeable about contemporary life.

Relevance-based analysis of learning outcomes can be used to identify other generic elements of learning which may be incorporated into an evaluation methodology. For example, Rogoff draws on a vast range of socio-cultural research and theory to show that family and cultural norms in relationships and interactions between adults and children affect participation in learning, learner relationships and learning outcomes in a variety of different ways. This can generally only be captured through local perspectives. For example, Inuit children are expected to become quieter the more intelligent they become, whereas US middle-class children are taught to ask questions. Among North American native communities "questions are avoided or purposefully ambiguous" while in Japanese culture "succinctness is valued and verbosity is frowned upon" (Rogoff, 2003, p. 311). Cultural norms such as this will affect learning outcomes for different groups of learners. They can be accommodated in relevance-based evaluation but not in performance-based evaluation.

Consensus on valuation of learning outcome is complex and is sensitive to cultural

context. Domains of learning have different relevance for each population which also changes over time. Rogoff provides a comprehensive review of ethnographic and socio-cultural research into child development, highlighting the cultural variants of acceptable and expected behaviour of children at different ages in different cultures (2003, pp. 150-193). Formal school systems set milestones in development embedded as linear measures of success often irrespective of cultural diversities, whereas Rogoff observes that "impressive variations occur in the age at which children are expected to carry out complex, culturally valued activities .... depending on how these activities and children's roles are structured in their communities" (Rogoff, 2003, p. 170). Variations in learner participation compare and contrast school learning with family or community contexts of learning. "One of the most powerful variations in children's lives in different cultural communities is the extent to which they are allowed to participate in and observe adult activities" (Rogoff, 2003, p. 133). Assuming that learning in a relevance-based evaluation context is viewed as 'a socially meaningful process of interaction with the real world' (Rogoff, 2003, p. 133), the evaluation has to measure those variants which are considered, by the evaluator or the evaluated, to be meaningful and relevant learning experiences, not limited to learning of cognitive skills taught in school.

Learning can be seen on one hand as providing opportunity for rural development through which to improve the lives of people who live in some of the harshest economic and environmental conditions in remote communities in developing countries, (Atchoarena and Gasperini, 2003, p. 29). On the other hand development initiatives, including schooling, can have a negative impact on local knowledge transfer linked to livelihood skills for survival. For example Rival, studying the introduction of formal schooling among the Huaorani Amazon forest community, observed learning outcomes in which "schooling and the removal of children from subsistence activities lead to the creation of social division and .. de-skill(ed) them with regard to forest knowledge" (1996, p. 159). Rival noted that school-going children spend less time in the forest than their non-school-going peers and as a result their knowledge of rainforest resources is limited. In the Huaorani study "modern identity acquired through state schooling is entirely antithetical to such (cultural) dispositions and cultural norms" (Rogoff, 2003, p. 162). The study shows that dominant identities associated with formal schooling irreversibly undermine and transform local minority identities within the community.

A study of Mayan education (Heckt, 1999) presents a summary of ideal values, skills, and ways of learning synthesised from recent educational and anthropological studies on the values and methods of education in Guatemala, where new identity is emerging as an

outcome of education. Ideal values are described as: productivity, discipline and determination in family and community work for economic subsistence; a community spirit of solidarity and cooperation; dialogue and consensus in decision making and conflict resolution, respect, obedience and courtesy in recognising authority within the family and in carrying out tasks. Working skills are described according to age and gender which include a sense of responsibility to carry out the tasks assigned. Transmission of learning takes place through practical experience and imitation of adults with a range of methods used to correct mistakes from incentives to punishment starting with some form of verbal action. Differing attitudes are taken towards the value of play and the value of indigenous and national language. There is evidence that many parents are concerned about the negative impacts of schooling on children's behaviour including harmful influences which contradict the cultural and family values.

These two anthropological studies of indigenous and formal school learning (Heckt, 1999; Rival, 1996) illustrate the complexities behind the assumption that learning improves lives and the importance of reflecting the local value perspective in the process of evaluation. Both studies describe the new identities which are emerging in remote communities as an outcome of education and the parallel removal of children from informal learning through participation in subsistence activities. Differing attitudes are taken towards the value of play and the value of indigenous and national language. There is evidence that many parents are concerned about the negative impacts of schooling on children's behaviour including harmful influences which contradict the cultural and family values. Dominant identities associated with formal schooling are shown to irreversibly undermine and transform local minority identities within the community. In these studies the universally valued dimensions of learning are framed against local cultural identities where elements of diversity are identified and learning outcomes are evaluated in terms of improvement to individual lives.

A relevance-based study which evaluates indigenous knowledge and literacy in East Africa, (Semali, 1999) provides an example of oral-aural literacy skills, termed indigenous literacy, locally valued as a core element of community knowledge. Since this form of literacy is not taught in schools it is not evaluated as a learning outcome. More significantly however, the point is made that even within a particular culture there may not be internal consensus on a shared knowledge-base or shared values about the purpose of schooling. Semali proposes that formal education should "depart from foreign interpretations of what is important at the local level" (Semali, 1999, p. 313), again emphasising the relevance of non-equivalence rather than standardisation. This study

resonates with weaknesses identified in performance-based evaluation. The validity of literacy rates is questioned as a basic indicator of learning outcome, particularly the difficulties of (i) unambiguous definition of literacy as a key concept and (ii) between-country equivalence of literacy. Watkins (2000, p. 75) notes, for example, that "few education providers in developing countries conduct reliable surveys on a systematic basis, and divergent definitions of illiteracy restrict the scope for comparison across countries". The development of alternative approaches to the evaluation of literacy discussed earlier (UNESCO, 2006, pp. 180-181) may provide the scope for addressing issues of performance and relevance.

A relevance-based study of three development alternatives in the Peruvian Amazon highlights the particular policy-to-local level inter-relationships which emerge when diverse cultural groups implement new education policy. At policy level the new Peruvian education policy reflects major concerns for social equality, sustainable development and partnerships involving all key stakeholder groups including nongovernmental organisations, social institutions and religious orders (Aikman, 1999, pp. 95-110). At local level the study describes three distinct outcomes of learning: modernisation, dependency and self-development.

The economic modernisation model, preferred by one Peruvian study population, places high value on acquisition of certificates and qualifications because this opens opportunities for individuals to access the next level up in the system. The dependency model, preferred by another group, links individual well-being with their dependency on land and the local environment, where the local community view is that formal education does not reflect their values and school learning does not connect with what they perceive as a useful body of knowledge. Paradoxically, the community increasingly recognises that acquisition of 'capitalist' skills and knowledge is a means to break out of dependency on destructive exploitation of scarce land resource. The model of self-development is exemplified by another indigenous group who want formal education in order to participate in the wider community in order to be able to combat change imposed from outside' (Aikman, 1999, pp. 104-106). In each model school learning represents a different valuation of actual learning outcome. Informal learning and intergenerational transfer of knowledge and indigenous practices similarly have different meaning and relevance in each model.

The implications for policy makers of this local, disaggregated level of relevance-based study are the diversities of value attached to learning by different cultural groups. Social

policy then demands a decentralised and non-standardised relevance-based approach to the evaluation of the impacts of learning on equality of opportunity, social justice, individual opportunity to improve ones life and social protection against exploitation and harm.

Relevance-based studies provide a rich source of data on relevance of learning to local contexts and to children's learning outcomes relating to opportunity for improved quality of life (Leach and Little, 1999; Levinson, Foley and Holland, 1996; Molteno et al., 2000). Such studies identify weaknesses in education systems and they also draw attention to several fundamental issues in the evaluation of learning outcome. First, such relevance-based studies are rarely undertaken internally by the governments and service providers who determine policy. Second, these studies focus on local issues which can be broadly identified from performance-based evaluation but which require contextualised interpretation. Achievement of fundamental policy change in the system at national level, and long term sustainable change, remains a challenge as long as 'development initiatives' are externally driven and based on aggregated evaluation. Relevance-based studies offer alternative solutions that are decentralised and responsive to local needs of learners. This basic principle, if embedded into national education systems, becomes an integral part of a process of evaluation of learner needs. Subsequent provision of local solutions, linking learning with improved quality of life for individuals, would demonstrate a greater level of social responsibility by policy makers than implementation of one standardised national system.

Generic differences between school-situated and life-situated learning also indicate that different evaluation approaches are required. Resnick (1987) cited in (Levinger, 1997) draws clear distinctions between school-situated learning and community-situated learning relating to achievement of situation-specific life competencies. Formal learning focuses on general skills and theoretical principles, tool-less thought and symbolic thinking, mastered individually. School-situated learning is suited to performance-based evaluation of outcomes arising from a combination of inputs including classroom teaching, compartmentalised into subjects supported by textbooks, a curriculum and examinations. In contrast, situation-specific learning involves direct engagement with tools and situations, often as shared tasks. Life-situated learning is located in a broader range of learning environments, developed through life experiences which vary from one person to another and which are cross-sectoral. Learning, viewed in this way, can be more comprehensively analysed through relevance-based evaluation. Within the context of social policy and social organisation, responsibility for evaluation of informal learning

outcomes is devolved to a range of learning providers including the family, school, religious leader, village extension workers and friends.

The implication is that evaluation methodologies need to reflect this diversity in learning situations. Standardised, performance-based evaluation of school learning outcomes is not designed to measure variation between cultures, while relevance-based evaluation does not lend itself to standardisation.

Relevance-based evaluation provides policy makers with rich sources of qualitative data to illustrate locally valued learning outcomes from which generic elements of learning may be identified. Generic elements of learning may include acquisition of indigenous knowledge and cultural practices, strategies for household survival including food security, social skills and corresponding gendered roles, intergenerational transfer of cultural values and indigenous literacy skills. Relevance-based evaluation of learning outcome, such as the Molteno case studies and anthropological studies of Rival, Aikman, Rogoff and Heckt above, provide qualitative analysis of diverse learning opportunities from local perspectives. The boundaries of measurable learning outcomes are expanded from the narrowly defined parameters of performance-based evaluation. The studies are centred on relevance-based evaluation of informal learning environments which is not directly generalisable between cultures. Learning outcomes cannot be standardised. As with performance-based evaluation of learning outcomes, norm referencing (peer-to-peer comparison of learning achievement) and criterion-referenced learning targets (individual progress in specific areas of learning) can both be applied.

Relevance-based evaluation of learning outcome may be criticised, in contrast to performance-based evaluation, as too unstructured, with no foundational underpinning to connect one study with another and no focus on intervention for redistribution of resources for example. Anthropological studies characteristically provide alternative insights into learning by moving closer to the perspective of the individual, positioning the research within the community, in contrast to the external position common to performance-based evaluation. However some connections are missing in relevance-based studies which tend to isolate the individual or community from the wider social context. For example there is a need to link individual learning with the context and influence of the dominant social policy and to evaluate learning in relation to opportunity the individual has to improve her life within the wider context. Distinctions can be clarified between the different conceptualisations of development used in relevance-based evaluation and performance-based evaluation. Economic growth in performance-based

evaluation is contrasted with cultural and traditional values of relevance-based evaluation; potentially exploitative development for immediate individual gain is contrasted with sustainable development; opportunity for more equitable, development may be identified based on relevance of learning to individuals; and evidence of widening development gaps serve to illustrate contrasting states of development.

CONCLUSION

This review of two approaches to evaluation of learning outcome summarises the strengths and weaknesses of performance-based and relevance-based methodologies. The information generated from the different value perspectives can be used by policy makers and service providers as sources of evidence of improved quality, relevance and equity in education. However, the critique identifies several methodological weaknesses in both approaches. First, the influence of social policy on individual learning outcomes is inadequately addressed in either methodological approach. In the context of evaluating the achievement towards the goal of Education For All, the analysis should include analysis of social justice and equity issues that explain how learning impacts on the lives of individuals. Second, there are no direct indicators of actual improvement in quality of life as outcomes of learning that measure negative and positive benefits particular to the individual over the short and longer term. Third, performance-based evaluation takes on the value perspective of the dominant education system and relevance-based evaluation draws on the local cultural value perspective. Neither positions the individual at the centre of the evaluation process. Lastly, the polarisation of qualitative, relevance-based and quantitative, performance-based evaluation misses an important opportunity for each to complement and add value to the other.

In the next chapter a third approach to the evaluation of learning outcome is reviewed, drawing on the capability approach to complement performance-based and relevance-based evaluation. The capability approach offers a framework within which to consider the issues raised in the above discussion in relation to valued learning outcomes and well-being improvement. The challenge is to identify the extent to which it is possible to use the capability approach as a complementary approach to performance-based approaches using generic dimensions of learning outcome and to retain some element of diversity from relevance-based approaches by capturing local perspectives on valued learning outcome.

Chapter 3. What Insights can a Capability Approach Provide in the Evaluation of Learning Outcomes?

INTRODUCTION

The capability approach is reviewed in this chapter for its potential in reconciling and complementing the differences between the performance-based and relevance-based approaches reviewed in Chapter 2. Quantitative performance-based indicators of education achievement make comparative and aggregated evaluations of trends and stages of development in education. Qualitative relevance-based approaches make context-specific evaluations of the trends in learning and cultural change. The capability approach points towards more comprehensive evaluation of both economic and human development (Alkire, 2002, pp. 26-27; Sen, 1997a; Sen, 1997b). The capability approach focuses on an evaluative space in which individual perspectives can be considered in relation to development as improvement in the freedom an individual has to live a life she values. As with the performance-based and relevance-based critiques discussed in Chapter 2, consideration will be given in this review to the extent to which the capability approach can be used to identify individual valued learning outcomes and associated improvement in well-being.

According to Robeyns, the capability approach can be used at three levels:

1. As a framework of thought for the evaluation of individual advantage and social arrangements
2. As a critique of other approaches to the evaluation of well-being and advantage
3. As a formula to make interpersonal comparisons of welfare

(Robeyns, 2001, p. 3)

In this study the capability approach is reviewed primarily as a framework for the evaluation of valued learning outcomes from the point of view of individuals and marginalised, impoverished social groups. It is thus concerned with social arrangements which open or close opportunities for individuals to acquire learning. Evaluation then focuses on social policy towards learning and the impact of this on the quality of life of individuals.

THE CAPABILITY APPROACH: BACKGROUND

The capability approach, developed through the work of Amartya Sen and Martha Nussbuam, is an interdisciplinary evaluation framework which challenges some of the

limitations of welfare economics and assessment of quality of life. It is still under development and evolving. Its origins lie in the debate focused on the measurement of inequality of income distribution and the realisation that "income is only one factor among many that influence the real opportunities people enjoy" (Sen, 1997a, p. 195). The capability approach focuses on a conception of development as, essentially, the expansion of individual freedom; "the removal of various types of unfreedom" is constitutive of development and well-being (Sen, 1999, p. xii).

The capability approach makes an important distinction between functionings, which are a person's actual achievements, and capabilities, which are the substantive freedoms one has to choose a life one has reason to value (Sen, 1999, p. 74). By defining the evaluative space using a conceptual framework of capability as freedom to achieve outcomes valued by the individual, the capability approach provides a structure which is lacking in performance-based quantitative evaluation of system efficiency. Freedom in this context implies opportunity for the individual to pursue that which she has reason to value, not merely as individual preference but within a framework that evaluates the effect of actions on the individual. The defined evaluative space provides a focus lacking in relevance-based qualitative evaluation. It demands analysis of ways in which particular learning outcomes contribute, negatively or positively, to the opportunity or choices an individual has to improve her life. The capability approach provides scope to reflect pluralities in its information base which contrasts, for Sen, with "the paucity of information that routinely enters utilitarian calculus" (Alkire, 2002, p. 8).

Various writers have, over the past 20 years, studied, questioned, challenged, tested and developed the original ideas and theory of the capability approach, comparing it in particular with utilitarian, welfarist and Rawlsian metrics of well-being ((Alkire, 2002; Nussbaum and Sen, 1993; Robeyns, 2003). Critics and proponents of the capability approach have built up a strong theoretical underpinning of economic, philosophical and ethical debate on issues of choice, equality, social justice, utility and preference for example, out of which come justifications for, and critique of, the operationalisation of a capability approach (Alkire, 2002; Fukuda-Parr, 2002; Gasper, 2002; Robeyns, 2000; Unterhalter, 2004).

Nussbaum (2000) provides a capability approach critique of utilitarian theory in which the adequacy of aggregated performance indicators is contested. "Average utility is an imprecise number which does not tell us enough about different types of people" and such aggregation cuts across distinct elements of lives which to some extent vary

independently (Nussbaum, 2000, p. 62). In the context of learning outcome a utilitarian approach would limit evaluation to measurement of efficiency in terms of number of students enrolled and number of examination passes, for example. Utilitarian aggregation, such as an increase in access to education simplistically equated with poverty reduction, loses any variance between economic, health and individual liberties which may also relate differently for different people, particularly in relation to learning outcomes. This mirrors some of the weaknesses of performance-based approaches discussed in Chapter 2.

Welfarism, as the provision of basic services for the improvement of individual quality of life reflected in the initiative of Education For All, may be criticised in Nussbaum's view as overlooking the ways in which individuals adapt their preferences and expectations to their perception of what is possible. Welfarism, while recognising that there are extremes within the aggregate scores, seeks to retain individual choice as a measure of equal treatment of individuals (Nussbaum, 2000, p. 117). Reasoned individual choices and consequences, such as those associated with dysfunctional or unsafe learning environments leading to dropout or non-enrolment, are acknowledged in subjective welfarism. Relevance-based evaluation similarly identifies extreme cases and individual choice but does not allow for aggregation or generalisation between cases. The Rawlsian approach identifies a list of social primary goods, including self-respect, liberty as well as resources such as wealth and income, and criteria for their fair distribution but overlooks the fact that "individuals vary greatly in their needs for resources and in their abilities to convert resources into valuable functionings" (Nussbaum, 2000, pp. 65-68). The basket of primary goods can include acquisition of skills, knowledge and values, and accreditation of learning. This raises the concern that (i) the basket of learning opportunity varies from one individual to another and (ii) the ability of each individual to utilise learning varies.

Sen, in contrast to either utilitarianism, welfarism or Rawlsian theory, proposes "to concentrate on the actual living that people manage to achieve" including the concept of freedom to be able to achieve the actual living which the individual has reason to value, since a focus on primary goods is inadequate to deal with an individual's well-being and freedom (Sen, 1999, pp. 72-73). A distinction is also made between the characteristics of a 'good' and the 'functioning' which is associated with the 'good'. In the context of learning outcome, a characteristic of the 'good' could be its practical relevance to the child and the functioning could be the expansion of opportunity whether or not the learning is considered relevant.

An economic evaluation of learning focuses on the inputs provided by education services and the resulting outputs as quantified contributors to economic growth. A capability approach focuses, not on resources or generalised outcomes, but on individual capabilities which "shifts the axis of analysis to establishing and evaluating the conditions that enable individuals to take decisions based on what they have reason to value" (Walker and Unterhalter, 2007, p. 3). Two significant methodological challenges remain – how to operationalise the capability approach and how to measure capability. This study provides a contribution to addressing these challenges.

Incompleteness

The capability approach is acknowledged as being "fundamentally incomplete" because of the ambiguity of ideas of well-being and equality, and "pragmatically incomplete" if unambiguous data is used rather than waiting for an unattainable complete dataset (Alkire, 2002, p. 10). The implication for evaluation of valued learning outcomes is that a partial, non-standardised perspective such as is considered a weakness in relevance-based approaches may be biased depending, for example, on the ambiguities of 'value' given to learning outcomes by different interest groups, which can then be criticised as being fundamentally incomplete. Alternatively, if only unambiguous data is used then this may similarly bias the perspective since this may limit the definition of learning outcomes to measurable cognitive domains, earlier identified as a weakness in performance-based evaluation. The argument is not whether one methodology is more valid than others but that, in terms of construct or content validity, the capability approach methodology, if it is to act as a bridge between the two opposing poles of performance-based and relevance-based evaluation, must demonstrate the extent to which it is able to measure capability and well-being improvement in any substantive way, acknowledging the inevitable incompleteness.

Four key elements of the capability approach are considered for their conceptual and methodological relevance to the evaluation of learning outcomes in this study. They are (i) the defining of lists of capabilities, fundamental capabilities and thresholds, (ii) conversion factors and vectors of potential functioning, (iii) definition of values, preference and choice, and (iv) well-being freedom. Each of these key concepts is discussed for its complementarity to performance-based and relevance-based approaches.

Defining Lists of Capabilities

The performance-based evaluation methodologies prescribe a list of learning outcomes against which systems and individuals are evaluated using norm-referencing or criterion-referencing. In either case a standardised listing of achievement is defined based on objective, externally-defined criteria. Relevance-based approaches do not start with defined lists of learning outcome but elicit the information from the field data specific to the selected population being studied. Capability approach writers are divided on the need to pre-define lists of capabilities. The dimensions of learning outcome can be elicited from the data, refined and organised in the analysis process into emerging lists of capabilities. This process, if pursued rigorously within a defined evaluative space, draws on local value perspectives to determine the dimensions of a list of learning outcomes and capability which is then linked to development indicators of freedoms and unfreedoms of individual to improve their lives.

The capability approach, as a general framework for the evaluation of individual advantage and social arrangements, does not prescribe a list of functionings. A capability approach perspective would take the view that "It is the people who will be affected by the policies who should decide on what will count as valuable capabilities" (Robeyns, 2001, p. 15). Nussbaum endorses this view with the statement that "people are the best judges of what is good for them" (2000, p. 51). This attention to local perspective enables pluralities of valued learning outcome to be accommodated within the capability approach. The tension between standardisation and generalisation of performance-based approaches and subjectivity and disaggregation of relevance-based approaches can be resolved by identifying core elements of central capability which are cross-cultural and which can be "differently constructed by different societies" (Nussbaum, 2000, pp. 74-75).

While Nussbuam defends her specification of central human capabilities as a foundation for basic political principles (2000, pp. 70-96), Sen takes a different approach in which capabilities are neither specified nor prioritised. Specification for Sen signals closure and the need to undertake a universal 'valuation exercise' involving mechanisms of identification of valuable functionings and subsequent weighting and aggregation (Alkire, 2002, p. 29). Neither Nussbaum's list of central human capabilities nor Sen's unspecified and unprioritised evaluation of functioning and capability align directly with performance-based or relevance-based evaluation approaches. Nussbaum's prescriptive list can at the same time accommodate "reasonable pluralism" and "more concretely specified" multiple realisability (Nussbaum, 2000, p. 77). Sen's theoretical underpinning

of substantive freedoms in evaluation of quality of life provides a framework within which to work and processes through which to identify freedoms in the development of a list of capabilities, ie. the specification is determined by evidence of improved well-being or increased deprivation.

In a poverty reduction project evaluation in Pakistan, Sabina Alkire operationalised the capability approach by developing a definitive list of capabilities from a comprehensive review of contrasting lists of human development dimensions drawn from a range of sources, including Finnis, Max-Neef, Nussbaum, Cummins, Narayan and Sen (Alkire, 2002, pp. 26-84). Each source provides a useful alternative approach to the debate on defining lists of capabilities. Finnis argues that "people and communities use practical reasoning to make intelligent choices as to how to establish and use capabilities" and the full range of reasons describe a complete range of actions (Alkire, 2002, pp. 45-46). This supports the view that local knowledge frameworks and local perspectives have value in the case, for example, of a parent using practical reason to explain why it is important for 14 year old children to learn one skill rather than another. The range of skills would be heterogeneous across populations and would be relevant to the particular populations from which they originated. A key characteristic of Finnis' approach is that a dimension is never permanently achieved but that individuals participate in and pursue well-being rather than achieve it (Alkire, 2002, p. 50). This relates directly to the understanding of learning as an on-going process, whereas performance-based assessment measures achievement at certain moments in time as developmental milestones against which groups of children from widely diverse situations can be compared.

Robeyns (2003) challenges the methodology of definitive lists and suggests a procedural approach, identifying five criteria to be used when drawing up a list of functionings and capabilities: the criterion of explicit formulation - the most basic criterion is that the list should be explicit, discussed, and defended; the criterion of methodological justification - when drawing up a list, we should clarify and scrutinize the method that has generated the list and justify this as appropriate for the issue at hand; the criterion of sensitivity to context - the level of abstraction at which the list is pitched should be appropriate for fulfilling the objectives for which we are seeking to use the capability approach; the criterion of different levels of generality - drawing up an "ideal" list, unconstrained by limitations of data or measurement design, or of socio-economic or political feasibility, and drawing up a more pragmatic list which takes such constraints into account; the criterion of exhaustion and non-reduction - all important elements should be included (Robeyns, 2003, pp. 70-71).

A four-step procedural approach for selection and refinement of relevant capabilities for evaluation of gender inequality was used by Robeyns (2003, p. 24): (i) unconstrained brainstorming; (ii) an engagement with the existing socioeconomic literature and debates on gender inequality; (iii) the generated list was compared with other lists; (iv) the list was debated at seminars and conferences, in informal discussions, and in feminist activist networks. In addition account was taken of arguments in anti-feminist literature. Robeyns' proposed methodology for identification of a list of capabilities differs from that of Alkire in that Robeyns does not make comparisons between theories as comprehensive justification for prescribed capability dimensions. She provides a procedural framework which can be applied to any list one might care to formulate. The list generated by a group of villagers or a group of academics could carry equal weight for consideration of validity so long as the procedural criteria are satisfied.

The outcomes are not dissimilar for both Alkire and Robeyns' approaches to defining a 'list'. Alkire uses her list almost as a checklist to ensure that there is comprehensive coverage of the subject in focus discussions and that there are no gaps in the range of information covered which respondents themselves may otherwise have not raised without prompting (Alkire, 2002, p. 224). Where Alkire's list is defined with justification prior to conducting fieldwork, Robeyn's procedure is not explicitly stated as a priori. Each step described by Robeyns could be adhered to ex post facto by allowing the definitive list of capability dimensions and sub-categories to emerge from the informant group with iterative comparison across lists and between the practical evidence and theoretical literature.

In the evaluation of valued learning outcomes, the limitations of prescribed dimensions in performance-based approaches and the lack of specificity and generalisability of relevance-based approaches have been described. Learning outcomes have global and local dimensions which a capability-based approach can absorb through identification of locally defined lists of capabilities and of multiple realisability, in addition to the prescribed performance-based parameters of valued learning. For example, literacy may be captured in a global definition of functionality or may be described as indigenous to one community or across a range of specific usages and manifestations including computer literacy, basic literacy, oral literacy, the "three r's", adult literacy and illiteracy. The local definition of valued learning is a key element missing from performance–based evaluation. A defined list of capabilities and multiple realisations of capability combines structure and boundaries without the constraints of standardisation. Consequently all

learning outcomes for a particular capability dimension can potentially be included in the evaluation

Conversion Factors and Vectors of Potential Functioning

The capability approach provides the scope to accommodate a range of individual variations in the evaluation process under the term conversion factors ie. individual variations in the shift from commodities (including goods and services) to achieved functioning (Robeyns, 2001, p. 7). In the learning context the effects of conversion factors can be demonstrated simplistically - if the same learning opportunities are provided to a group of children, the outcomes will vary according to individual conversion factors. There are "many-one correspondences between 'commodity bundles'" of goods and services and outcomes as educational achievement (Sen, 1997b, p. 521). "Conversion of capabilities varies enormously with a number of parameters ….. and a variety of other interrelated factors." (Sen, 1997b, p. 511). Social, personal and environmental factors will each contribute to the way in which the learning opportunity provided is converted into skills and knowledge, which will be different for each individual learner. The difficulty is in isolating key factors from multiple variables and in making comparison between different populations. The correlation of cause and effect is complex. In the context of comparing multiple variables quantitative performance-based evaluation provides a relatively reliable solution by showing trends and by identifying the key variables to broadly explain inputs to outputs. Qualitative analysis provides the background description to explain the trends and the circumstances which produced the particular outcome, including relevance.

The capability approach adds a further dimension to the quantitative and qualitative analysis by considering opportunity as a positive notion of overall freedom (Robeyns, 2001, p. 7). In this case a child who learns about engines from school books without having the practical experience might score well in a test paper whereas a child who tinkers with old vehicles and helps at the local garage in her spare time may not score well on a test but has the skills to find a fault and fix a problem. The child who can pass the test paper may be able to study engineering in future and the tinker may be excluded from this opportunity. In a capability-based evaluation the negative and positive impacts of learning could be considered in relation to individual freedom. However this also requires that "we need to know much more about the person and the circumstances in which she is living". (Robeyns, 2000, p. 6).

The capability approach uses the terminology vectors of potential functioning to describe a set of capabilities or potential pathways. In the specific context of learning outcomes, the capability set would include those learning pathways that lead towards outcomes which the learner values and from which the learner can choose. For example a child who has not been able to attend basic primary education due to problems of access may have learned livelihood and life skills in the home. The capability set also includes alternatives which the child (or the person acting in the child's best interests) could choose, but does not choose. For example individuals may choose to learn basic numeracy and literacy skills through Non-Formal Education classes and to gain knowledge of new technologies through participation in agriculture extension work programmes or they may choose not to pursue these options. The choices which are made are influenced by the interests and disposition of the individual. Learning may be accessed through formal education, through a particular work experience or through informal self-learning and interactions with likeminded people. The choices an individual makes enables or restricts their freedom to move from potential functioning to achieved functioning – "potential" being that which the individual has the substantive freedom to be and to do, "achieved" being that which the individual actually chooses to do and to be (Robeyns, 2001, p. 5; Sen, 1999).

Conversion factors can be conceptualised in the context of learning outcomes as the individual way in which each child carries forward the same learning opportunity according to social, personal and environmental differences. Vectors of potential functioning, in the context of learning outcomes, can be conceptualised as all the alternative pathways a child can take at any given moment in their learning continuum. In the evaluation process both conversion factors and vectors of potential functioning provide explanation of a child's actual learning outcome in relation to what they can do or be, ie their capability. Conversion factors and vectors of potential functioning suggest that indicators particular to the individual may be identifiable which expands the limitations of performance-based and relevance-based indicators to which each individual is matched. For example, in addition to a child's school performance and relevance of learning to her cultural context, indicators can show how her learning is converted into improved social or economic opportunity and the range of future learning pathways open to her. This places the individual at the centre of the evaluation framework with each individual positioned differently.

Defining Values, Preference and Choice

In evaluation of individual value judgement a balance has to be found between the view that what a person wants or does not want (welfarist) is what is good for them and the view that there is a 'universal good' (Platonist) which is independent of what individuals may desire (Nussbaum, 2000, p. 117). In the case of valued learning outcome, a welfarist utilitarian view of individual preference would accept as equivalent two different situations of female non-attendance, for example the girl-child who accepts the fact that she does not go to school because the family considers it irrelevant or detrimental to her improved well-being and the child who does not attend school because the parents are aware that she may be subject to physical or psychological abuse if she attends (Unterhalter, 2003, p. 17). A Platonic view of learning as a universal goal is exemplified in the global recognition of education as a human right and the near-universal commitment of governments to Education for All.

The concept of 'universal good', mirrored in the Education for All (EFA) initiative may be challenged at levels of operationalisation, where there are differences between individuals and groups in what they consider of value. EFA when interpreted and implemented in the narrowest sense of simply providing access to school for all children, may not be 'good' for all children, for example for those in overcrowded, dysfunctional classrooms. Similarly, children often struggle to learn in situations where the language of instruction and the language of the teacher is not the child's home language (UNESCO, 2004, pp. 154-158). In the case of the second language learner there may be conflicting views between the home and school as to what is valued learning. In Papua New Guinea "parents felt that their language should figure more prominently to counter evidence of alienation and social problems among young people"; local pressure resulted in language reform (UNESCO, 2004, pp. 156-157). This example combines issues of relevance, local perspective and participation in decision making to understand differences in valuation of learning outcomes and contrasts this with what is considered 'good' at a universal or local level.

Drawing on the capability approach, the researcher seeks an understanding of or insight into the individual's perception of learning which she considers is 'good' for her and an understanding of the value of that learning as contributing to an improvement in her well-being. The concept of valued being and doing, fundamental to the capability approach, provides scope for the evaluation of individual choice. (Alkire, 2002, p. 7). It also enables clarification of individual reasons for valuing one opportunity or another. This contrasts with valuation of learning outcomes in performance-based approaches where scope and

reason for choice is not identifiable. It also contrasts with relevance-based approaches in which scope and reason for choice may only incidentally be identified in relation to improvement in well-being within the local context.

Evaluation of learning outcome does not generally consider individual preference or choice, yet in terms of the capability approach this is considered a significant variable. The child's freedom to choose one life or another will be affected by their range of learning choice and by factors which influence their learning preferences. The concepts of adaptive and revealed preference can be considered in the evaluation process in relation to capabilities and choice or freedom which individuals have to pursue one learning path or another. This dimension is not found in performance-based evaluation but is implicit in the psychology of learning and in the capability approach (Alkire, 2002; Gardner, 1993).

Adaptive preference relates to an individual's acceptance of her situation as being beyond her means to change. The concept is particularly relevant to people living in situations of poverty and deprivation. Account must be taken of "the many ways in which habit, fear, low expectations and unjust background conditions deform people's choices" (Nussbaum, 2000, p. 114), in order to gain an understanding of the external factors which give rise to resigned acceptance. Preference deformation can be influenced by cultural belief, low self-esteem or simply lack of access to relevant information, any of which may apply, for example, to unschooled parents and children living in contexts of rural poverty.

Revealed preference is questioned in the capabilities literature as evidence not of actual preference but of preference inferred from choice. Actual choice is important as it "reflect(s) the states of affairs and processes that we value, and because choosing may pertain to our well-being" (Alkire, 2002, pp. 7-8). For example a person may choose not to attend school because her labour is needed at home (revealed preference) but the actual preference may be to attend school if there were no economic or social constraints. The capability approach suggests the importance of informant description of what is valued as important learning outcomes and associated issues which enable clarification of actual preference and choice rather than observation of revealed and therefore assumed preference.

The evaluation of adaptive preference and conditioned expectations in relation to individual capability requires further discussion. The concept of adaptation represents a range of meanings, the most common interpretation of which is that individual preference is malleable to the circumstances in which each person lives (Clark, 2007, p. 4 & 9; Sen,

1999, p. 63). This is observed as a tendency among those who are poor and disadvantaged to be satisfied with less – poorer learning opportunity for example - than those who are more advantaged. An alternative interpretation of adaptive preference focuses on the specific form of adaptation associated with social conditioning including religious or cultural indoctrination. A third interpretation of adaptation relates to individual capacity to acquire, retain and process relevant information for making informed judgments and rational choices (Clark, 2007, pp. 4-5; Qizilbash, 2006, p. 92).

Sen raises the point that preferences are adapted by each individual to her particular circumstances "especially to make life bearable in adverse situations" (Sen, 1999, p. 62). The evaluation of adaptive preference should then include analysis of the influence of conditioned expectations on both upward and downward aspiration (Clark, 2007, pp. 25-27). In the context of valued learning outcome, downward adaptation is reflected, for example, in the negative aspiration of some learners who describe their own learning achievement in terms of failure using expressions such as "I didn't go to school; I don't know anything". Negative conditioned expectations such as these tend to be linked to situations of disadvantage arising from and contributing to capability deprivation. As a consequence downward adaptation may lead to resigned acceptance of poor quality or dysfunctional learning opportunities, unquestioning exclusion from learning opportunity and lack of courage to demand equitable access to opportunities of relevance to the individual learner. Positive adaptation reflects individual opportunity and achievement of valued learning outcomes associated with enhancement of individual capability. The conditioned expectations for the learner may include enhanced aspirations for future learning opportunity and livelihood prospects.

Preference adaptation, both positive and negative, is influenced by the conditioned expectations of parents towards their children, teachers towards their students, and peers to their fellow learners, whether in formal, non-formal or informal learning environments. Social policy, social systems and institutions also contribute to shaping each individual's conditioned expectations. The evaluation of capability must go beyond a simple survey of revealed preferences inferred from individual choice to include the range of factors which influence conditioned expectations.

The application of a deliberative participatory process (Alkire, 2007, p. 2) broadens the scope for evaluation of conditioned expectations and preference. The deliberative process can include in-depth responses from informants through "reflection and discussion rather than unconsidered and unexamined immediate responses ... (and) the elicitation of

information relating to the reasons and experiences underlying the valuation of different capabilities" (Vizard and Burchardt, 2007, p. 48). For example, the individual values of learners can be elicited to contextualise and rationalise the understanding of individual capability enhancement or deprivation. The interpretation of informant responses also requires an evaluation of the extent to which individuals have the ability to acquire and process all the necessary information for making informed judgements (Clark, 2007, p. 8). The emphasis is not only on evaluation of individual ability to access information but on the extent to which the accessible information base shapes and conditions individual expectations and capabilities.

A capability-based evaluation which draws on public discussion and deliberation must address the problems likely to be encountered in the practical application of a process of deliberative democracy. In particular the evaluation process must address inequalities in participation "ranging from the exclusion of weak and vulnerable groups on the one hand to inequalities in power and voice on the other" (Clark, 2007, p. 12). One strategy to ensure that all voices are heard is to provide appropriate opportunity to elicit direct responses from a wide and representative range of stakeholders. The deliberative process used for the evaluation of preference and conditioned expectations may draw from family members' perceptions of valued learning, their reasoning and description of the instrumental, intrinsic and positional value of different learning outcomes, the perceived aspirations of children and their parents interpreted in relation to conditioned expectations and analysed in relation to upward or downward aspirations. Adaptive preference poses a complex challenge in the evaluation of capability, particularly where it is embedded in the self-evaluation of those living in situations of poverty and deprivation. Emerging debate is beginning to question assumptions about adaptive preference: (i) adaptation is not universal and does not reflect individual living situations and (ii) adaptation is not reflected similarly across all domains of well-being (Clark, 2007, pp. 26-27).

In the context of broad learning outcomes, the capability approach provides a framework within which potential learning outcomes that are valued by the individual can be identified. It allows a distinction to be made for example between (i) those children or parents who are informed and choose an option which expands their range of choice in future thereby expanding their capability, (ii) those children or parents who are informed of learning choices available to them but choose not to pursue them as restricted capability which is self-chosen, and (iii) those children or parents who do not have access to information and therefore have no choice, which restricts their capability and equates to unfreedom or capability deprivation.

Capability, preference and choice may be analysed differently for children than for adults where the child's perspective may be considered immature. The adult perspective will also include the uninformed adult, as a type of immaturity in contrast to the informed adult (Gasper, 2002, p. 28; Saito, 2003, pp. 18-33). These variations on individual valuation and choice contrast with performance-based methodologies in which the macro-level metric is a proxy of actual achievement (functioning) within the formal education system, from an external standardised professional valuation.

It is also important to analyse micro-level tensions between the individual's freedom or autonomy to choose for example to remain illiterate, and the need for social mobilisation and advocacy whereby individual lives are improved through some level of coercion (negative) or informed choice (positive) (Alkire, 2002, p. 172). This again challenges the Platonist concept of one 'universal good' in situations where, for example, people are resistant to perceived negative influences of a modern education system or where, conversely, traditional cultural values are perceived by some as inferior to modern learning. These tensions can be identified between generations and between cultures holding different values and different world views.

Preference and choice are dimensions of the capability approach to evaluation which add value to performance-based or relevance-based evaluation procedures through analysis of information on choices available to and made by the learner, from the individual learner's perspective, and through insight into ways in which these affect individual capability. The capability approach expands relevance-based analysis of choice and preference in learning outcomes to include range of choice in addition to actual choice, actual preference in addition to revealed preference, and analysis of the valued freedoms which are outcomes of choice and preference.

Defining Freedom and Well-Being

Performance-based and relevance-based approaches to evaluation of learning outcomes focus on actual outcomes, as achieved levels of functioning. In the capability approach the emphasis shifts to include freedoms and improvement in well-being for the individual which are an outcome of learning as well as an evaluation of capability deprivation and capability restriction which limit the individual's freedom.

Sen's capability approach focuses on human freedom as the ultimate objective of development (Roquette, p. 7). For Gasper (2002, p. 26) freedom has several refinements

of meaning. In the context of health for example, "freedom does not only mean the ability to be healthy, but actually being healthy, not mentally and physically infirm, free of infirmity". Similarly, in the context of learning it is not only the ability to be educated but actually being educated, not illiterate, innumerate, lacking in knowledge or unskilled. Gasper questions the sufficiency of a conception of freedom which can rank the same person differently according to the criteria used. For example, the well-educated post-graduate who is unemployed and demoralised scores positively on certification of learning outcome and negatively on criteria of what the learning enables the person to do and to be. In contrast, the Grade 5 dropout who has a satisfying livelihood and a healthy, stress-free, self-sufficient lifestyle scores positively on learning that enables the person to do and to be but negatively on certification of learning outcome.

Freedom concerns both the range of choice a person has and the values and preferences the person holds for each choice she could make. Take for example the child who is a low achiever academically and who drops out of school after failing Grade 5 exams. She may have been learning in other-than first language, in subjects she did not identify as relevant to her life situation, in a school environment where she felt insecure, far from home, with teachers who were unsuited to the profession and with no other option than to leave school. It is not possible to assess the freedom a person has without assessing the alternatives between which the person can choose (Sen, 1993, p. 34). Evaluation of learning achievement cannot be made without consideration of the range of choices a person has in terms of the freedom she has to choose one option or another. Examination results, a performance-based metric of learning outcome, do not reflect any variance in choice between a child who attends a well-resourced and fully functioning school, and two children of potentially similar ability, one of whom attends a dysfunctional school and the other whose circumstances limit her access to school such as distance to school, gender discrimination, personal disposition or social and opportunity costs of schooling for the family. In performance-based evaluations, children are assessed as equals on standardised criteria of cognitive learning, despite unequal variables that impact on learning outcome. The criteria are decided externally according to value judgements which represent the values of the mainstream dominant education system, determined by social policy.

Gasper makes the point that what one is choosing between is important in contributing to an understanding of what one has reason to value (Gasper, 2002, p. 28). The choices available to a child in Colombo compared to those available and known to a child in a

remote farming community in rural Sri Lanka will clearly have an effect on value judgement of the child and her family, including their expectations with regard to individual capabilities. In the particular case of children, whose values might be considered as immature (Gasper, 2002, p. 28), the criteria used by the child and by the evaluator to make judgements of valued learning, and the identification of decision-makers in valued learning choices is of significance in the evaluation process. One might evaluate well-being using a generic descriptor of improvement such as better health or literacy skills, or as a judgement of a person's achievement towards her own goals which may differ from the generic indicators of well-being (Sen, 1993, p. 35).

The range of valued choice raises specific concerns in relation to evaluation of achievement in basic education and learning (Gasper, 2002, pp. 26-28). First, achievement in learning needs to be interpreted in terms of (a) what is attainable - what learning opportunities are available (goods and services), (b) the ability of the child and the agent (parents, teacher, state) to act and to attain the required level of knowledge and skills, (including the characteristics of goods and services), and (c) the impact of learning on longer term attainment or capabilities. Secondly, expansion of an individual's education and learning generally increases the choices or options available and leads to enhanced freedoms. Gasper includes the increased capabilities to perceive, formulate, reflect, choose and act, none of which can be measured by any standard performance-based indicator of education achievement. School certification, widely used as a performance-based metric of learning outcome, does not necessarily evaluate skills and knowledge valued by the learner. It does not account for any learning of the unschooled and school underachievers and does not evaluate the range of options available to the learner.

The range of valued choice may be used as an indicator of the freedom an individual has, either to choose one learning pathway or another from a number of options or to have no choice. At a level of basic education, functional literacy, numeracy and essential life skills are considered an entitlement for all people (UNESCO, 2004, p. 28). At this basic level, an indicator of choice should include freedom of access to basic education supported with information from which to evaluate functionality of learning outcome and identification of life skills relevant to and valued by the individual. Indicators of lack of freedom of choice include no access to basic education, access to poor quality basic education resulting in failure to achieve a level of functional learning, freedom to opt out of basic education and successful completion of basic education however that is judged. The range of valued choice is expanded once these fundamental learning outcomes are

acquired, and freedoms or basic capability are enhanced. A distinction can be made between a child who fails a Grade selection examination and whose choices are consequently restricted at a basic level of learning in contrast, at a higher level, to the successful student who has the freedom to make a learning choice based on intrinsic interest and personal satisfaction rather than learning for employability.

A capability-based approach can take account of freedom of opportunity to choose one learning pathway or another and the future opportunities which learning enables, as indicators of learning outcome. Performance-based and relevance-based approaches do not provide the scope for this level of analysis because they measure observable achievement of past learning using pre-defined parameters which does not account for the identification of present or future alternative opportunities.

MEASURING LEARNING OUTCOME AND CAPABILITY

Learning as an outcome of education is acknowledged, in the capability approach and more generally in development theory, as a basic contributor to improvement in a person's well-being. Becoming numerate, for example, would be considered as the removal of the unfreedom of innumeracy. This conception of learning and capability indicates a means of expanding the evaluation of learning outcome as fundamentally more than performance-based measurement of quantifiable elements of school learning. The value perspective, freedom of choice and resulting improvement in well-being of the individual can be included in evaluation of learning outcome rather than limiting evaluation to system accountability. It also suggests a means of structuring open-ended relevance-based measures by seeking answers, from the learner, to the question "what is the individual able to do and to be?" as an outcome of learning.

Boundaries to loosely defined, qualitative evaluation can be set using generic dimensions of learning outcome which focus on enhancement to and deprivation of individual freedoms or capabilities. This situates the information, drawing on quantitative indicators within the qualitative real life and social setting of the individual (Nussbaum, 2000, p. 71), and adds the dimension of individual capability – "what I can do for myself?" - to the quantitative account of "what has been done for the person?" by the system (Alkire, 2002, p. 167).

Measurement of valued learning outcome is complex in its scope, with causal relationships between variables and their impact on capability difficult to define. Each

level of disaggregation introduces greater definition of significant factors which vary between one community and another. Nussbaum describes the advantages and disadvantages of a reductivist or aggregated understanding of what human beings and communities are when social sciences simplify complex human activities to a mathematical representation. One of the main disadvantages is that a reductionist evaluation used in performance-based approaches "obscures or denies the richness and plurality of human values and commitments" (Nussbaum and Sen, 1993, p. 233). A completely objective position is one that not only denies the richness of diversity but which also sacrifices information that may be relevant as an explanation to strengthen understanding. At the opposite end of the scale of extreme disaggregation used in relevance-based approaches, human self-interpretations cannot be rationalised. "Cultural value schemes are highly various and largely incommensurable with one another." (Nussbaum and Sen, 1993, p. 233). A balance has to be found between objective and subjective extremes, rationalised to a level where evaluation of generic dimensions can be analysed without losing key elements of diversity. Nussbuam (1993, p. 233) makes a further point that a position of neutrality and detachment in evaluating human development is impossible. Informant and researcher bias is inevitable in rationalising disaggregated qualitative data.

Capability deprivation or expansion of capability can be assumed to be more critical for those who are on or below the poverty line, for whom choice and self-determination are minimised which also suggests "minimally adequate levels" of basic capability (Sen, 1993, p. 41). Sen's conceptualisation of poverty as "basic capability failure, that is, the inability of individuals and communities to choose some valuable doings or beings which are basic to human life" (Alkire, 2002, p. 156) implies that a basic set of capabilities (beings and doings) should be identifiable which, in the context of learning outcomes, also suggests a corresponding set of learning outcomes, the achieved functioning of which provide individuals with the freedoms to move out of poverty. Two criteria described by Alkire with reference to basic needs, applied specifically to the understanding of basic needs and the capability to be educated, are helpful for clarification The first criteria for identifying basic capabilities relates to what is fundamental in order to avoid harm, and the second relates to a level of generality, which allows basic capabilities to be applied to different situations (Alkire, 2002, p. 160). Terzi elaborates on the meaning of harm if the basic need for education is not met. The individual is harmed, in the sense of being disadvantaged, if the opportunity for education is lacking. Since education is foundational of other capabilities and future capabilities, a lack of learning opportunity potentially harms or disadvantages the individual in respect

of other functionings and basic capabilities (Terzi, 2007, p. 35).

Burchardt (2006, p. 19) maps out a hierarchy of capabilities summarised as (i) basic capabilities where different outcomes are the result of differences in substantive freedom; (ii) intermediate capabilities, where different outcomes are, for public policy purposes, the result of differences in substantive freedom; and (iii) complex capabilities, requiring supplementary evidence to identify relevant differences in values and preferences between groups. These categorisations can be aligned with individual learning outcomes and capability where (i) basic capability relates to the child's particular personal, social and environmental characteristics; (ii) intermediate capabilities relate to impacts of particular social policies on individual learning outcome; and (iii) complex capabilities where social, economic, cultural and environmental diversities result in different outcomes for different learner groups. These categories may be used to refine the evaluation approach, differentiating between individual characteristics, external impacts of social policy and diversity between learner groups.

An incremental enhancement of capability through education can make a significant difference to the most basic capabilities for vulnerable groups (Dreze and Sen, 2002; Hutmacher, Cochrane and Bottani, 2001; Leach and Little, 1999). Robeyns (2001, pp. 12-13) distinguishes between fundamental capabilities and basic or non-basic capabilities. In Robeyns' view "a persons capability consists of a number of fundamental capabilities which are each made up by a number of more specific capabilities, some of which are basic and some of which are not basic". Basic capabilities are significant in the context of developing countries in relation to "the freedoms to do some things that are necessary to keep out of poverty". The fundamental capability of 'education: skills and knowledge' will be made up of the aggregation (for each individual) of a number of basic capabilities, such as functional literacy, access to information (for choice and self determination), skills and knowledge to participate effectively in the workplace and to manage family and home affairs efficiently, and a number of non-basic capabilities such as access to study medicine, afternoon classes in fine arts, active membership of the local history society.

The three descriptions of basic capability (Burchardt, 2006; Robeyns, 2001; Terzi, 2007) provide a basis for developing criteria for the evaluation of learning outcomes and enhancement of basic capability. This is of particular relevance in evaluating the learning opportunity of vulnerable and disadvantaged learner groups.

Capability Approach and Learning Outcomes Critiqued

The development of the theoretical basis of the capability approach over the past decade has opened debate on a range of challenges to its application in education research. At one level the capability approach concepts and terminology are debated and clarifications called for in relation to existing education theory and practice. At another level the philosophical and methodological challenges are discussed in relation to existing theoretical positions. These two levels of debate and critique applied to the capability approach are reviewed in this section specifically in relation to the development of education theory.

At the first level of critique, the capability approach includes several conceptual issues which require clarification to avoid ambiguity or misunderstanding. Non-specificity, open-endedness and vagueness are points which economists might raise as weaknesses in the capability approach. A counterbalance to this perspective is given by Alkire (2002, p. 92) illustrating the difference between the two perspectives. The economist's position of economic rationality focuses on ends, whereas Alkire refers to the capability approach of 'ethical rationality' which focuses on means. The latter includes evaluation of cultures, customs and traditions valued within a society and the commitment to public discussions and judgments within the evaluation process.

The capability approach may be considered as "a focussed tool designed to address a gap in other participatory assessment methodologies, and it accesses and processes richer information than other approaches" (Alkire, 2002, p. 231). However, some limitations are described by peer-reviewers of the capability-based evaluation methodology proposed by Alkire: other evaluation tools are needed to complement capability-based data including information on duration and magnitude of change; change over time needs to be tracked; attribution of impact and impact on the wider community is needed; distinction between shorter and longer-term impacts is needed; and communication skills are critical to interpretations between evaluator and informants. A particular criticism is the apparent or potential conflict where a capability-based evaluation is focused on individual perspective and individual values but information gathering, analysis and interpretation is almost unavoidably undertaken through external intervention. This methodological challenge applies not only to general studies informed by the capability approach. It is addressed in Chapter 4 in the specific context of this study.

Learning is essentially the result of individual actions. Learning outcomes and inequalities in learning outcome between individuals are observable and therefore easily

measurable (Burchardt, 2006, p. 10). The capability approach draws a distinction between individual outcomes and the opportunity or substantive freedom of individuals to achieve that which they value, the measurement of which is more complex. The measurement of substantive freedom focused, for example, on the freedom an individual has to access learning which they value, raises several methodological issues. The evaluation of an individual's freedom to learn is not readily observable and the equalising of opportunity or freedom to learn, were it possible, may not be meaningful. The question also arises as to the influence of social policy and institutional impacts on learning outcome. For example social policy generally makes little distinction between learner groups. Social policy generally assumes that the needs, values and preferences of the child will be provided for and that provision is broadly similar for all children, overlooking the individual characteristics of learners (Burchardt, 2006, pp. 17-18). Burchardt proposes that headline indicators are used to resolve the technical and conceptual difficulties of aggregation while retaining a measure of multi-dimensionality. "Priorities can be identified by making comparisons within domains ... across groups or within groups across dimensions" (Burchardt, 2006, p. 20).

The second level of critique relates to the philosophical and methodological position of the capability approach compared with other theoretical positions. Sen, in a challenge to the theoretical position of Rawls' primary goods approach (Sen, 1999), prompts Pogge (2003) to make the case that Rawls approach is an opposing and superior theory. The two debates are reviewed by Unterhalter and Brighouse who conclude that "thinking about distribution and capabilities requires a range of different ways of evaluating social justice in the provision of education that goes beyond the existing indicators" (2007, p. 106). This endorses the focus of the study to expand the indicator framework for the evaluation of learning outcome.

Pogge (2003) lists two main objections to the capability approach: first is the issue of natural inequalities, and second is the way that unjust international inequality is dealt with.

The first objection relates to evaluation of the relationship between the resources each person has and what they can do with them. In the resourcist approach a child who has a Grade 6 pass but can do nothing with it is evaluated as equal to a child whose Grade 6 pass enables her to proceed to the next level of formal education. Whereas the resourcist would limit evaluation to equality in access to resources, a capability-focused approach

would seek to evaluate the child's actual learning outcome according to personal endowment and future opportunity (Unterhalter and Brighouse, 2007, p. 95).

Unterhalter and Brighouse also consider the first objection in relation to features of social organisation that result in individual disadvantage (2007, p. 96). A child who cannot understand the language of the teacher or the textbook may be counted positively in a resourcist evaluation measured by provision of teaching and learning resources. Evaluation of the impact of language on a child's ability to learn focuses on individual capability. Beyond resource evaluation, the capability evaluation then opens opportunity for consideration of alternatives to compensate for the individual disadvantage. The focus for social policy debate could centre on resourcist solutions such as textbooks in the language of the learner, teachers with knowledge of local language and provision of intensive language lessons through immersion in the dominate national language. Evaluation of individual capability would measure whether these solutions compensate for individual disadvantage, realising potential causes of capability deprivation and failure due to incompatibility in languages used by the teacher and the learner.

The second objection of unjust international inequality is debated by Unterhalter and Brighouse in relation to positionality where complex inter-societal differences cannot be measured and compared using a resourcist metric of primary social goods alone, but can be enhanced by consideration of capability. Education and learning opportunity are differently distributed by each country affected by a range of factors including the influence of labour market rewards, which "infect even comparisons among developing countries, especially in educational contexts" (2007, p. 99).

The various ways in which different families prioritise investment in learning for their children cannot be measured in resourcist terms alone. Learning may be differently valued between individuals, families, and wider populations according to a range of different criteria. The financial commitment of individuals to investment in learning will be based, in addition to actual resources available, on the value accorded to one learning opportunity or another. Investment in learning may be differently perceived from long term or short term perspectives and may be perceived simply as a financial commitment or may be more broadly perceived as developmental, involving time and quality of interactions with the learner.

The theoretical framework of the capability approach presents specific challenges in relation to its operationalisation. Three further issues of operationalisation are considered

here, both as challenges and for the possible solutions presented by the writers. First a solution to the problems of measuring unobservable capabilities is sketched followed by a reference to the problems of ranking and weighing of complex responses in the seeking a capability-based approach to the evaluation of human development. Lastly, the issue of equivalence and equalisation is raised.

Grasso and Di Giulio (2003) identify some of the constraints and challenges in operationalising the capability approach noting that Sen has not provided a formula or path for translation of theoretical concepts into empirical concepts and variables. They choose to measure vectors of achieved functioning, not capabilities, as a practical solution to the difficulties of measuring capabilities seen as an elemental valuation of the capability set. They refer to this restriction in the operationalisation of the capability approach as a major simplification which avoids the particular challenge of "measurement of capabilities and bypass(es) the problem of their unobservability" (2003, p. 5). The trade-off between complexities of a wide informational base and manageability requires only the identification of "a minimum set of functionings as main dimensions of well-being" (2003, p. 7) and is considered as a pragmatic compromise to resolving the issues of completeness and complexity.

Gaertner (1993, pp. 63-66) identifies further challenges in relation to operationalisation of the capability approach, for example measurement of complex functions such as weighting and ranking of capabilities, interdependencies between individuals, and change over time caused by a complex range of external factors. The three issues can all be addressed to an extent by drawing on a local perspective for justification of the position taken. For example, if local stakeholders in learning, in this case children and parents, identify a complex range of functionings which are relevant to their lives and they then weight and rank them through guided participatory activities, the result can be justified (Alkire, 2002, pp. 226-228). Local perspectives and justifications of stakeholders provide a pragmatic compromise between the theoretical model with its attendant complexities and operationalisation of the capability approach, reflecting that which is realistically achievable and justified within the practical constraints of human and social situations.

The capability approach is critiqued by Roemer from the normative welfare economist perspective in which equality of opportunity is quantified into a unidimensional redistribution prescription. Roemer addresses three main criticisms of Sen's capability approach (1996, pp. 191-193). First, an index of functionings is not identified, a concern

which was discussed earlier in this chapter in relation to the defining of lists. Second, no equivalence relations are given to enable comparison between capability sets. Third, Sen is imprecise in his discussion on equalisation of capabilities and that partial orderings as a solution to equilisation is unproven. These last two points are considered by Burchardt (2006, pp. 20-21) drawing attention again to the multidimensional perspective of the capability approach in which there is no simplistic metric for the evaluation of equivalence relations in, for example, improved quality of life. Metrics such as partial ranking can be used for comparative purpose, however in each case the compromise between aggregation of data and the analysis of variation and diversity has to be justified.

The capability approach, viewed as complementary rather than opposing other approaches, counters much of the criticism, viewed as a viable approach that adds another dimension to the evaluation of human development. As an approach which is evolving, the critiques provide opportunity to review and refine the approach without any alteration to the foundational principles of evaluating development as individual freedom to improve ones quality of life.

Capability Approach Applied to Education and Human Development

As a generic tool for evaluation, the capability approach can be applied to a wide range of social science, economic and human development research topics including gender, poverty, equality/equity, livelihoods, sustainable development and health, each of which endeavours to expand our understanding of capabilities as a metric by which to describe human development, quality of life and well-being in other-than economic terms (Alkire, 2002; Gasper, 2002; Grasso, 2002; Nussbaum and Sen, 1993; Sen, 1997b).

The capability approach has been applied specifically to various aspects of education evaluation, for example: achievement of Education for All (EFA) targets and Millennium Development Goals (MDG) (Brighouse and Unterhalter, 2002; Unterhalter and Brighouse, 2007), basic education and social change (Alkire, 2002; Dreze and Sen, 2002), the development of capacities (Saito, 2003), capabilities and gendered education (Unterhalter, 2003), capabilities in the context of basic capabilities, disability and special educational needs (Terzi, 2007), education and social justice (Walker and Unterhalter, 2007). Each of these studies focuses on the theoretical underpinnings of a capability approach operationalised to evaluate learning and learning outcomes within formal learning systems. The work of Biggeri (2006) and Comim (2005) focuses on the development of a metric and child development indicators (ChDI) of capability, not specific to learning outcomes alone but extending across the range of capability

dimensions as they relate to the child's freedom to live a life they value. The key issues from these applications of the capability approach in the context of education are described below in relation to evaluation of learning outcomes.

In a critique of Education for All (EFA) targets and Millennium Development Goals (MDG), (Unterhalter, 2004) the dependence on aggregated, performance-based data is questioned because of lack of quality, validity and reliability. The credibility accorded to performance-based indicators is also challenged by the fact that "the importance given to test scores as an index of education quality has often led to education reforms and approaches to resources being linked to school level performance in tests." (Unterhalter, 2004, p. 3). In the development of a capability-based evaluation, a theoretical model is developed by Unterhalter and Brighouse to analyse the interrelationships between instrumental, intrinsic and positional values of formal education. Learning can be of instrumental value, for example access to better employment prospects, of intrinsic value, for example expanding individual self-esteem or ability to learn independently, or of positional value, for example evaluating the individual's identity, rather than ability, in relation to equality of learning opportunity and outcome, including effects such as gender and ethnicity. Positional value, in the context of learning outcomes, distinguishes for example between two children with the same potential learning ability but different learning opportunity and between two children with the same learning opportunity but different opportunity to convert learning into improvement in quality of life. The critique provides a foundation for operationalising the capability approach applied to EFA evaluation in the formal education system within the constraints of quantitative measurability.

In the context of gender inequalities in education, which is a core concern of MDG and EFA goals, Unterhalter (2004, p. 114), points to a weakness in the use of testing as a performance indicator because testing measures only what has been taught and not the "wider social goods or depth of learning it is meant to 'indicate'". Drawing on the work of Kabeer (1999), Unterhalter describes three different dimensions to be examined in the case of education and gender empowerment: "firstly, measuring access to schooling up to a certain level... secondly ... how decision-making regarding education is taken ... (decision-making about access to schooling in households, as well as decision-making in schools or in education ministries, or in local authorities) ... lastly measuring empowerment would also need to be analysed with regard to achievements that flow from education – that is, not just narrowly defined notions of reading and writing up to a certain level, or GDP per capita, but more complex notions of well being" (Unterhalter,

2004, p. 121). These points illustrate the need to expand the definitions of performance and learning outcomes if measurement of well-being is to be achieved, including evaluation of participation in decision making and empowerment. This focus on participation can be linked with the concerns expressed by Booth and Lucas in the context of performance-based approaches in which lack of community participation in identification of evaluation parameters is a methodological weakness (2002, p. 17).

Dreze and Sen (2002) provide an analysis of education and development in India from a capability approach perspective based on national and international performance indicators. The analysis is confined to basic formal education using proxy indicators which highlights many of the issues of quality, access and relevance for people living in contexts of poverty in a developing country, based on values of the formal education system. The "inescapable interrelations between the different domains of living", for example literacy and economic opportunity or schooling, social and cultural freedoms, are assumed through performance indicators rather than illustrated for their "actual effectiveness in enriching the lives and liberties of people" (Dreze and Sen, 2002, pp. 3-4). As Alkire argues (2002, p. 173), Dreze and Sen present a contradiction in their use of indicators as a metric of basic capability. Quantitative, aggregated indicators are used to demonstrate inequality, for example differences between rural and urban school attendance figures. However, equality cannot be demonstrated through the same measures since disaggregated disparities are concealed (differences in actual quality of learning experience of all children who attend school) and no account is taken of individual valued learning and capability (differences in relevance and practical application to improved lives).

In a review of perspectives on and interpretations of basic capabilities, Terzi (2007, p. 35) describes how education can be justified as a basic capability because it is fundamental and foundational to the fulfillment of other capabilities. A list of basic educational capabilities is defined, acknowledging that it may be argued that the list expresses a 'dominant' conception of education "in the sense of reflecting the norm of the people in power" (Terzi, 2007, p. 49). The counter-argument rests on the justification that, as participant members of specific social arrangements there are enabling conditions such as literacy which "appear(s) necessary precisely in order to avoid inequalities" The caveat is that the 'specific' form of literacy is "context-dependent, and more complex social and economic arrangements will require certain forms of literacy rather than others" (Terzi, 2007, p. 49).

In the review of literature on operationalisation of a capability approach in education there is extensive analysis of the theoretical framework. Across the range of human development research fields there are very few examples of concrete application of a capability approach through a complete cycle of methodological design, implementation, analysis and conclusions from the evidence. The work of Biggeri (2006) and Comim (2005) is breaking new ground in this respect, through research with children, but is primarily focused on quantitative aggregation of data. It draws on children's perceptions of a comprehensive range of capability dimensions. Biggeri used questionnaires and focus group discussion with sample groups of 11 to 17 year olds from developed and developing countries. The research sought to ascertain the opportunities children thought were important for all children, from their own experience. The responses were used to identify relevant capabilities proposed by children, not confined to learning alone. 88.5% of children identified education as a priority element which all children should be able to experience.

Both Biggeri and Comim use the capability approach to develop child capability metrics and quantitative, aggregated analysis of research findings including multivariate analysis of data. This places the research at the performance-based end of the spectrum while incorporating the relevance-based elements of individual valuation of capabilities and accountability of both negative and positive freedoms. To this extent the research provides a possible metric of capability as a supplementary bridge between closed performance-based and unbounded relevance-based evaluation methods.

Research undertaken by Saito (2003) focuses more specifically on the expansion of a child's capabilities through formal learning, with the underlying assumption that what is valuable to the child can, and arguably should, be determined by adults. Saito questions whether the capability approach is applicable to children in the sense of well-being and freedom, and their lack of maturity in being able to choose what is best for them. A relevance-based perspective would challenge this view to ensure that diversity is accommodated, for example children in different cultural settings have different roles and responsibilities determined by local interpretations of maturity. More generally it raises the question of how a level of maturity is defined and at which point an individual is able to choose what is best for them.

Post-project evaluation of learning outcomes and broader evaluation of unforeseen impacts can provide capability-based evidence of expansion or restriction of capabilities and extent to which learning has improved individual well-being, but this is rarely

undertaken. One example is provided by Alkire (2002), in which evaluation of project outcomes against project objectives is complemented by participant perception of other unpredicted learning outcomes. In the case of project evaluation, the baseline, inputs and main objectives are clear and the total sample size pre-determined. The Alkire procedure adds value to performance-based and relevance-based evaluation procedures including information on a wider, un-predefined and all-inclusive range of impacts on the lives of individuals. These outcomes are identified by those whose lives are impacted, including positive and negative impacts.

By its nature, ie centred around and able to accommodate pluralism, incompleteness and freedom to do and to be, a capability approach can be semi-structured to the needs of the subject under evaluation and to the objective of evaluation without necessarily pre-determining values. An assumption here is that particular rather than universal values are an important information base in evaluation of, for example, community and adult perceptions of valued learning outcomes for children and desired capabilities related to the learning outcomes. In conceptualising a framework and methodology for evaluation of capabilities and valued freedoms, negative and positive impacts must be considered, for example in the deskilling which can result from time spent at school and loss of learning opportunity in the home and community. This may also be balanced against a measure of real achievement from school attendance in terms of conversion of skills and knowledge from formal education into life and livelihood needs.

The capability-based applications, reviewed above, justify the need for an alternative to counteract the weaknesses inherent in performance-based evaluation of learning outcome. Discussion ranges across a spectrum of capability-based alternatives and additional considerations. One alternative is to propose a different value base focused on instrumental, positional and intrinsic value of learning outcome to the individual (Unterhalter and Brighouse, 2007). Another alternative challenges the use of the dominant model of learning as the metric emphasising instead the context dependency of learning outcome, closer to relevance-based than performance-based evaluation but focused on learning which is foundational to the capability of an individual to improve her life (Terzi, 2007). In some cases aggregation of performance-based data may be justified and sufficient (Dreze and Sen, 2002), and in other cases it is argued that additional consideration of disaggregated data is needed to reveal inequalities and their impacts on the lives of individuals (Alkire, 2002). The capability-based approach to evaluation is shown to be a bridge between the polarities of performance-based and

relevance-based evaluation, while clearly also providing the scope to combine with each of the approaches where appropriate.

CONCLUSION

The capability approach provides a framework for the evaluation of learning outcomes which expands the scope of performance-based and relevance-based approaches. This review of the three approaches to the evaluation of learning outcome provides the theoretical context and background to the study. Empirical data on local perceptions of valued learning outcome is now needed to test the theory. The application of theory to the study of real lives raises several challenges which are considered in the research methodology (Chapter 4) and tested in the empirical study (Chapters 5 to 9). The first challenge is in capturing local perspectives and interpretations of valued learning and learning outcome. A related challenge is the linking of learning with opportunity or freedom for individual development, in particular the conceptualisation and analysis of non-tangible learning outcomes and freedoms. In addition to the identification of positive and negative learning outcomes as opportunities and constraints to individual development, a measure of the range of individual choice is needed in order to identify those choices not taken up and the extent to which choice is informed or not. Lastly, in order to counter a major criticism of performance-based indicators, the application of a capability-based approach in this study should move the evaluation methodology beyond the use of standardised proxy indicators of learning outcome.

Three questions were presented in Chapter 1, which the empirical study will attempt to answer.

The first question "How can evaluation of learning outcome be expanded sufficiently to measure the impact of learning on the lives of individuals?" focuses on ways in which the three evaluation methodologies complement each other with the added dimension of the capability-based perspective operationalised in the specific context of individual learning.

The second question "What lessons can be learned from empirical data on local perspectives of valued learning outcome in contexts of rural poverty to inform an understanding of the influence of social policy on the basic capability of an individual to be educated and to improve her quality of life through learning?" draws directly on the empirical data. It is anticipated that analysis of responses from the recipients and beneficiaries of learning will provide fresh insights into learning-related issues of poverty

reduction and human development. While there will be issues of validity due to the subjective nature of the evaluation process, there may be opportunities to understand the complexities of individual learning experiences that are not otherwise revealed through current evaluation approaches.

The third question "Can an improved indicator framework be developed for the evaluation of learning outcome that goes beyond the limits of existing indicator methodology?" is intended to lead the analysis towards a refined version of the particular study observations. This will enable the key issues to be captured as indicators that might be proposed for potential use by policy makers in the evaluation of learning outcome. The indicators will focus on the evaluation of capability as individual freedom to improve ones life through learning.

Chapter 4. Research Methodology

INTRODUCTION

This study draws on empirical data to explore the complementarities between performance-based, relevance-based and capability-based approaches in measuring learning outcome and human development. The methodological issues of data collection and analysis, social, economic and educational description of the study setting, and the procedures followed including the structure of the research team, the design of research tools and the processes of organising and interpreting the data are described in this chapter. Ethical considerations and issues of generalisation of findings are also presented.

The primary purpose of the empirical study is not to present a comparative study of learning outcomes in Sri Lanka and Bhutan, but to explore the potential of operationalising a methodology through which to evaluate broad and diverse learning outcomes applicable to any context and any learner. The research methodology drew on empirical evidence to substantiate the development of a theoretical framework and indicators of evaluation. The analysis methodology was designed to generate indicators through which to evaluate the influence of social policy on learning outcome and individual entitlement. As a result, empirical data could be used to operationalise the capability approach from its theoretical basis, applied to conversion factors and vectors of potential functioning.

The research methodologies of grounded theory (Glaser and Strauss, 1967, pp. 88-103) and naturalistic enquiry (Guba, 1981; Lincoln and Guba, 1984) are used since both techniques begin from a position of discovery and both emphasise verification of insights into the experiences of the informant, compatible with the capability approach. A semi-structured approach to data collection allows for the informant to describe her learning experience based on local contexts and learner frames of reference. Grounded theory processes of iterative data interrogation allow for information to emerge which is not pre-defined, from which formal theory can be generated from the substantive evidence. Issues of credibility, transferability, dependability, confirmability and authenticity are addressed (Mertens, 2005, pp. 254-258), where qualitative data drawn from local perspectives must be validated and concepts such as 'values' and 'individual freedom' demand contextualised definition.

THEORETICAL FRAMING OF THE RESEARCH METHODOLOGY

The research methodology used in this study is qualitative. Within the capability approach there is scope for qualitative or quantitative methodology though the tendency in other applications of a capability approach has been towards quantification. By defining the evaluative space, the methodology used in this study is more bounded than open-ended, relevance-based approaches. Lists of capabilities were deliberately not pre-defined but were elicited through the data analysis process (see Chapter 8), contrasting with the performance-based approach of closed, pre-defined parameters. The methodological challenge of measuring capability is due in part to qualitative aspects of capability as unrealised potential rather than actual outcome (functioning) and as diverse sets of variables, non-standardisable and non-comparable between individuals. Theoretical debate concerning measurement within the capability approach is addressed in this study, linked to the procedure for defining of lists and the procedures for coding and ranking of outcomes and capabilities. Weighting of valued learning outcome as a quantifiable metric is considered to be beyond the scope and relevance of this study

While the substantive theory is grounded in a specific context, it was anticipated that the analysis would identify some general implications and relevance drawn from the specific cases for the development of a grounded formal theory (Glaser and Strauss, 1967, p. 79), which could be developed into a capability-based evaluation framework. The formal theory, applicable to a range of diverse contexts, and the substantive theory, applicable to the sample populations, will both be incomplete in the same way that Sen argues that the capability approach is essentially incomplete. Ambiguities make fundamentally unachievable the complete ordering of what can be evaluated as valued learning and well-being freedom for each person. Waiting for complete clarity is not pragmatic in the case of such philosophically complex concepts as well-being, freedom and values (Sen, 1992, p. 49). Glaser and Strauss in contrast use the term 'saturation' to describe "a combination of the empirical limits of the data, the integration and density of the theory and the analyst's sensitivity" suggesting that some level of completeness is achievable. The research has achieved a level of saturation to the extent that a common body of information was generated with the likelihood that further sample groups of informants would have generally reiterated the same. The data set was not complete in the detail, in which there is always scope for further expansion.

Methodological Issues – Qualitative Data Collection

Fundamental to the capability approach, the study sought to understand the meaning of

experiences from the informant's perspective, which is a technique of naturalistic enquiry (Tesch, 1990, p. 51). A naturalistic enquiry begins with (i) the identification of the concern or issue on which the enquiry is based, in this case how learning in its broadest sense contributes to improvement in quality of life drawing on the capability approach framework, and (ii) the identification of means of data collection which in this study uses focus group discussion to investigate the local perspectives of 14 year old children and their parents in relation to the issue of valued learning outcomes and capabilities. In both of these steps a concern of the researcher was to ensure robustness and trustworthiness of data and its interpretation as representative of the informants view. This was achieved through training of the research teams, piloting and review of the research instruments, techniques of probing and cross-tabulation of information between informant groups, and sensitivity to the research and cultural contexts. The discussion moved between four broad areas of valued learning at home, with friends, in the community and at school.

Critical to grounded theory, as distinct from other methodologies based on content or thematic analysis, is theoretical sampling (Tesch, 1990, p. 65) in which the sample boundaries develop as the theory emerges and the method of constant comparison in which repeated interaction with the theory emerges from data analysis leading the researcher to further insights and investigation. The process is dynamic and interpretative (Pidgeon, 1996, pp. 78-79). The grounded theory methodology of theoretical sampling enabled the initial sample criteria to be defined – 14 year old children and their parents - with scope to expand the sample to include new areas of enquiry with new informant groups as issues emerged – for example carers, village elders, extension workers and 14 year old urban youth were added to the initial informant groups.

Grounded theory rests on assumptions, shared with other qualitative methodologies, regarding the perspectives and interpretations of the various actors including the researcher and those who are involved in each stage of the research process. Grounded theory acknowledges that these perspectives and interpretations contribute to conceptualisations of the emerging theory. Multiple perspectives are considered a methodological strength. Professional and personal knowledge enables interpretation based on theoretical sensitivity with "reciprocal shaping" accepted as an inevitable result of researcher, actor and data speaking to each other (Strauss and Corbin, 1998, pp. 172-173). This study uses the local, and therefore contextualised, perspective of learners and other primary and secondary informant groups to generate and ground the analysis in "the production of meaningful account that knits together the multiplicities, variations and complexities of participants' worlds" (Henwood, 1996, p. 35).

Issues of generalisability have become of increasing importance in recent years because of the shift in qualitative research methodology from a mainly anthropological focus to more mainstream social research contexts and from a merging of quantitative and qualitative research as complementary means of illuminating and describing the reality of a situation. Generalisation is counterbalanced in this study with emergence of specific local and individual perceptions of valued learning outcomes and capabilities, including personal (eg. disposition to learning), social (eg. current family circumstances) and environmental (eg. access to learning) conversion factors. These areas of focus are used in the capability approach to identify individual conversion of resources and opportunities into particular outcomes and consequently their impact on the capability or freedom of the individual. The process is similar in principle to the performance-based input-process-output model. However, performance-based inputs are externally resourced whereas in the capability approach the social, environmental and personal conversion factors are generated by each individual. Furthermore, performance-based generalisation is based on narrow, standardisable outcome metrics whereas the capability approach can accommodate diverse outcomes.

The methodology used in this study draws on Sen's capability approach of democratically determining the lists of capability in contrast to Nussbaum's approach of pre-defined universal lists of capability (Alkire, 2002, p. 29; Nussbaum, 2000, pp. 70-96). The debate between the two approaches relates to (i) the purpose of and justification for defining lists of capability, and (ii) the extent to which a comprehensive interpretation of the subject being evaluated is considered necessary. For Nussbaum the list of central human functional capabilities can be applied at national level to interpret policies such as the American Bill of Rights. In such cases a universal list is required for national legitimacy and consensus. In the context of this study the universal level of valuation can be similarly applied to a nation's constitutional guarantees of basic Education For All which provides a normative legitimacy and sets the basic political principles for cross-cultural comparison. In such cases the need to determine universal values is justified, as is applied in performance-based evaluation.

Three arguments are raised by Nussbaum concerning the complexities of determining and applying universal values. The "argument from culture" questions the assumption that there is a global interpretation of value (Nussbaum, 2000, pp. 41-49), applied in the context of this study to debate the validity of universally valued learning outcomes. The culture argument must be made for valuing learning which is inclusive of different traditions and beliefs. The "argument from the good of diversity" acknowledges that "we

don't all agree on a single set of categories but speak many different languages of value" (Nussbaum, 2000, pp. 50-51). The culture and diversity arguments are closely linked and may be considered in relation to their impact on learning outcomes as a measure of harm or avoidance of harm to individuals. A cultural argument is illustrated by situations in which girls and ethnic groups are excluded from mainstream education. In this example it may be argued that the universal value of education must reflect democratically determined criteria for the evaluation of the cultural dynamic, interpreted in this study as local perspectives on valued learning outcomes. The diversity argument is illustrated where a child's home language is not the language of the classroom. The child may be disadvantaged where assessment of learning achievement does not take account of linguistic diversity. Conversely, children who have the opportunity to learn through a language which is not their home language may be considered advantaged in future learning opportunity, for example through widening of access to higher education. The "argument from paternalism" addresses the concern that universal values used as benchmarks pre-determine what is good for people rather than "respect(ing) people's freedom as agents and … their role as democratic citizens" (Nussbaum, 2000, pp. 51-53). Nussbaum's conclusion is that, while there are political justifications for determining universal values, a pre-defined universal list can remain open ended, can be contested and remade and can be to some extent differently constructed and differently realisable by different societies (Nussbaum, 2000, pp. 101-105).

Sen argues that the evaluative process should include a procedure of social choice, public discussion, democratic understanding and acceptability to others. He expresses concerns about the feasibility of undertaking "a universal 'valuation exercise', deciding on the mechanisms by which valuable functionings are to be identified and subsequently choosing relative weighting and aggregating" (Alkire, 2002, pp. 28-30). Sen stresses the need for reasoned public debate particularly where value judgments are applied to selection of evaluation criteria in social policy (Sen, 1999, p. 79). He acknowledges that a procedure which relies on democratic search for consensus does not exist. The question is then raised as to how to apply the democratic process where full consensus does not exist. Identification of "general concrete functionings" are proposed by Alkire (2002, p. 31) as an alternative to Nussbaum's universal list. General concrete functions are synonymous with Sen's five types of instrumental freedoms – political freedoms, economic facilities, social opportunities, transparency guarantees and protective security. These categories widen the space for consensus on practical issues such as learning outcomes which overcomes consensual difficulties presented by abstract principles such as liberty.

In this study a pre-definition of valued learning outcomes was deliberately not made. The methodology drew on Sen's capability approach of democratically determining the lists of valued learning outcome rather than Nussbaum's approach of pre-defined universal lists of capability. Consensus was reached through democratic and reasoned group discussion for the purpose of generalising from the particular, without anticipating or requiring either completeness or the development of a universal list of valued learning outcome. The local perspectives on valued learning outcomes which emerged from semi-structured focus group discussions were used to begin to construct a framework of generic dimensions or general concrete functionings such as local livelihood skills, moral education, health knowledge and household skills on which to map emerging detail, capturing the diversities within each dimension. This satisfies the condition of democratic process merged with the application of grounded theory method of constant comparative coding processes.

Categorisation of information requires a balance between divergence and convergence of information. The research team were aware of the need to employ naturalistic enquiry strategies for ensuring that boundaries were neither too constrained (convergent) nor too loose (divergent) (Lincoln and Guba, 1984, pp. 88-103). Grounded theory similarly addresses issues of boundaries and allows the researcher to derive theory from the data rather than deduction from a priori knowledge of the subject, logical assumptions or hypotheses. Thus the emphasis is placed on "theory as process; that is, theory as an ever-developing entity, not as a perfected product" (Glaser and Strauss, 1967, p. 32). The evaluative space of this study allows scope for the children and parent informants to determine boundaries through their identification of learning which they value and explanations of how they perceive it as important to their daily lives. Valued learning outcomes considered by the informants as important to their own lives was inclusive of any learning at home, in the community, with friends and at school. This methodology is compatible with the capability approach which in this respect complements the performance-based approach (convergent) and the relevance-based approach (divergent).

Methodological Issues - Qualitative Data Analysis

The process of data analysis is used in this study to investigate both positive and negative learning outcomes as they affect individual capability. This qualitative perspective complements the quantitative performance-based cost-benefit analysis of returns from learning. Analysis may indicate the perception, for example, that some children who attend school gain little which adds value to their life chances in terms of formal learning

because their level of achievement falls below the first level of certification and sustainable levels of functional learning. At the same time the analysis may show the cost of school attendance where children lose the opportunity to learn life skills for livelihood learning which could enhance their opportunity. In contrast, some children who do not attend school may, as a result of non-attendance, actually benefit by enhancing their life chances through other informal learning opportunity. This reflects the capability approach concepts of freedom and unfreedom recognised as of importance in sustaining development. Positive learning outcomes enhance individual capability, for example by providing the benefit of access to the next level of learning. Negative learning outcomes, such as opportunity costs, restrict an individual's capability to improve her well-being or to live a life she has reason to value (Alkire, 2002; Sen, 1999; Unterhalter, 2004).

The research methodology seeks to identify positive and negative learning outcomes which have a strong linkage to capability. Practical application of learning to local livelihood opportunities, and increased self esteem and empowerment through functional literacy and functional bilingual language skills are clearly positive learning outcomes. The segregation of children from adult activities through school attendance has a potentially negative impact to be balanced with the added socialisation value of school attendance. The causal link between valued learning outcomes and capability is tentative because of incompleteness in the scope of data – it is unrealistic to imagine that all factors could be accounted for in any circumstance (Glaser and Strauss, 1967).

The causal link is also tentative due to methodological difficulties in demonstrating causality where multiple factors affect outcomes, as in learning-capability relationships. If each factor is taken out of a more holistic context, information loss is similar to that in aggregated performance-based data analysis critiqued in Chapter 2. However, by mapping the positive and negative factors linking learning outcome and capability onto a matrix or profile, patterns and themes emerge from the local perceptions of children and their parents which are indicative of impact. This may include the generic dimensions of livelihood choices, variations in home-school experiences, levels of exposure and information access, participation in learning, and diverse learning pathways. These dimensions could be used to formulate profiles or patterns within communities or sub-populations as a qualitative analysis which defines capability sets through coding and ranking, avoiding technicalities of validity associated with quantitative weighting procedures. The profile would describe the specific characteristics of the learning environment in relation to valued learning outcomes and capability. Some dimensions may be more relevant than others and the selected criteria may change between different

profiled groups. For example, the sub-population of children not attending school would include participation in non-formal and informal learning situations whereas the sub-population of children attending school would include characteristics of school attendance and informal learning situations which may be the same or different from the non-attenders description.

In the process of generating theory from the research data it is inevitable that qualitative data will be reduced and generalised through iterative coding and categorising, eliminating some less relevant information. This process follows the procedures of grounded theory through which higher level concepts and generalisation of terminology are developed (Glaser and Strauss, 1967, p. 110). The analysis of qualitative data is also inevitably subjective and open to a degree of interpretation by the researcher. In this study it is acknowledged that the use of a research facilitator and research translator has also affected the interpretation of data.

SAMPLING METHODOLOGY

Convenience sampling was used to select Sri Lanka and Bhutan as the research locations determined by practical constraints of researcher time, accessibility and familiarity with both societies. The researcher has lived and worked extensively in education with rural communities in Sri Lanka and Bhutan. Extreme case sampling (Robson, 2002) was used to select economically and educationally disadvantaged rural communities. Some development assistance had been received by the sample populations but they are economically underdeveloped according to standard economic indicators (Annexes 1, 2 and 3). The selected rural and urban areas have a higher than average percentage of the population living close to or below the poverty line (see Sri Lanka and Bhutan Poverty Line definitions – Annex 1 and Annex 2) which was used as a preliminary selection criteria.

Field data for the Sri Lanka study was collected in two rural schools and one urban school during a three week period in March 2004. Field data for the Bhutan study was collected in two rural primary schools and two rural Non-Formal Education classes, a rural lower secondary school and an urban lower secondary school over four weeks in October 2004. Approval for the studies was granted by the Education Director (Schools) in Sri Lanka and the Education Minister in Bhutan through formal application (Annex 4). Initial selection of location and individuals was informed by advice and professional judgement from education officers, familiar with the locations, and familiar with the rigours of

research methodology. The Zonal Deputy Education Director (Planning) in Sri Lanka and the District Education Officer in Bhutan provided local data in addition to assisting with the local level logistics.

Non-probability was used to select schools and children since statistical generalisation is not sought in this qualitative study (Robson, 2002). Schools with 14 year old children were selected - Grade 9 (Sri Lanka), Grade 4 to 8 (Bhutan) - as well as some children in the age group who had dropped out or never attended school. A random sample of four to six children were selected from class registers for each focus group discussion. Representative groups of mothers and fathers were invited for separate discussions. In fact parents were self-selected on the basis of availability from work, usual participant / family representative in school meetings, and interest or expectation from the gathering. The majority (76 percent) were mothers. Non-school attending children were selected on the basis of those who could be contacted. All the non-attending children seemed very relaxed about being called back to school – this was the most convenient location at which to gather.

A comparison sub-sample of urban disadvantaged children was subsequently studied to test basic assumptions relating to rural – urban differences. The urban school sample, in both capital cities, was selected on the basis of economic and educational disadvantage. Children were selected as for the rural sample above. Parents were not included in the urban Sri Lanka sample due to time constraints. The Bhutan urban sample of low income families were all, by chance, recent urban migrants, unskilled or semi-skilled, unschooled parents living in rented accommodation but with rural land-ownership, holding high hopes for their children's future. Their reasons for urban migration were employment, perceived improved standard of living (electricity, TV, telephone, transport) and schooling opportunities. Secondary informants in the rural communities of Sri Lanka and Bhutan included the agriculture extension worker, a local employer, teachers, village headmen, health workers and community religious leaders.

The samples are detailed in Annex 5, Tables 17-20.

Sampling Constraints

The impact of rural-urban migration and overseas employment was observed among the sample of parents and school dropouts in Sri Lanka. For example, several fathers from the rural location were working away in Colombo having secured paid employment outside

the local community. Several mothers of the urban sample were working in the Middle East. This situation is typical of communities in Sri Lanka (Dias and Jayasundere, 2001, p. 10). In the rural Bhutan sample many adults and children had never travelled outside their remote valley though some communities migrate for summer and winter grazing leaving behind the elderly and school-going children. Where children had relocated away from home to attend lower secondary school with limited boarding facilities their older siblings or grandparents acted as caretakers and attended discussion groups to represent the parents who worked in the village.

THE RANGE AND SELECTION OF SETTINGS

The target group selected for this study is 14 year old children living in contexts of poverty in rural communities in developing countries. The key reasons for this selection are twofold.

First, 14 years old is the age at which basic education is nearing completion[3] in many developing countries. This period of formal education is considered sufficient to provide children with a foundation in basic literacy, numeracy and essential life skills (Birdsall, Levine and Ibrahim, 2005, p. 161). It is an age of transition from childhood through adolescence to adulthood, with the attendant shifts in responsibility which come with maturity. By age 14, young people are able to reflect back on their earlier formal and informal learning experiences and can look forward to consider how this learning has helped prepare them for life. They are able to articulate their views and aspirations, while perhaps also having some perspective on the changes taking place within their culture and community in relation to valued learning outcomes and capabilities.

Secondly, rural communities in developing countries are often harder to reach and less well resourced in terms of provision of quality education relevant to social, economic and cultural development needs (Birch et al., 2002). Ethnic, language, cultural and economic challenges may cause lower than average scores on standard performance-based indicators of enrolment, completion and examination results. Local indigenous skills and knowledge learned outside the formal education environment may be important for

[3] In Bhutan Basic Education is now set at completion of Class X (17 years old if no repetition). Completion of Primary Education to Class VI marks the end of formal education for 69 percent of children who enrol in primary school: GER estimate of 72 percent (Annex 2). In Sri Lanka children complete Grade X examinations aged 17, with some drop-out at Grade IX where transfer to another school is required (Annex 1). In Bhutan age-grade correlation is spread due to late enrolment and repetition. In Sri Lanka age-grade correlation is very narrow since few children repeat or enrol late (Annex 2).

survival and sustained development in rural communities where there are limited employment opportunities. A capability-based approach provides scope for evaluation of social policy impacts on the freedoms an individual has to improve her life.

Sri Lanka: Local Characteristics

The location selected for the rural Sri Lanka study is a mix of estate-owned tea plantations and family-run vegetable gardens, predominantly small scale land owners and landless families with a combination of low-paid contract labourers, small shop keepers and self-employed farmers. The nearest urban and tourist locations are 50 km away and local transport services are good. The urban sample are predominantly unskilled labourers, public transport drivers and small shop keepers living in areas of low-cost housing in the capital city with a high incidence of street crime and drugs.

Bhutan: Local Characteristics

The rural community of predominantly subsistence potato farmers have family land. Potatoes are a very low-margin cash crop. Whole families migrate to higher summer pastures with yak or cattle. Other families move seasonally to lower rice paddy land. The nearest urban centre is 2 days walk or a half day bus journey away. There is a once weekly bus to market (depart Friday, return Monday) but no other local transport. The urban sample are unskilled and semi-skilled migrant labourers, living in rented accommodation in the capital city, with village land in their home family location up to 3 days travel away.

Background: Education and Development in Sri Lanka

Education has been accorded high priority in Sri Lanka since independence in 1948 underpinned by the principles of free and equitable access at all levels [(Sri Lanka National Education Commission, 2003, pp. 4-8). Almost universal enrolment in basic education to Grade 11 and high literacy rates[4] places Sri Lanka ahead of all other South Asian nations in performance-based rankings. English was the medium of instruction from independence until the 1960's when social policy determined that schools changed to either Sinhala or Tamil medium. Technical vocational education was strengthened in the 1980's including emphasis on agricultural studies but education in rural communities remained generally less well-resourced than services provided in urban centres (Hettige

[4] GER: Sri Lanka 111 percent, S.Asia 101 percent. Illiteracy: Sri Lanka 8 percent, S.Asia 44 percent World Bank. (2003), *Sri Lanka Country Assistance Strategy of the World Bank Group 2003-2006*. Colombo: World Bank.

and Mayer, 2002, pp. 133-135). A separate system of basic education operated in the tea plantation estate schools until the 1970's when they were gradually incorporated into the main stream education system (Little, 1999, p. 199). The country has been affected by more than 20 years of civil war which had an impact on availability and equity in distribution of education resources particularly within the conflict zone[5] (World Bank, 2003, p. 18 and 23). Since the 1980's a quota system for secondary school scholarship and entry into higher education has been offered in an attempt to give a more equitable distribution of opportunity between the two ethnic groups and to more disadvantaged communities (Annex 1) (Sri Lanka University Grants Commission, 1997/98).

In Sri Lanka there is relatively high internal efficiency – high enrolment, low repetition and low dropout rate (UNESCO, 1999b and Annex 1). However the Sri Lankan system limits achievement through the use of several certification-based selection filters. Public examinations at Grade 5 offer the first level of scholarship and financial assistance for selective entry into the national schools which are identified as centres of excellence. The majority (approximately 90 percent) of those who are entered for the examination fail (score below the pass mark) and approximately 75 percent of the cohort score less than 50 percent. At O level and A level the competition is similar with the end result that approximately 2 percent of students gain university entrance. At each of these competitive hurdles families invest time and money in tuition classes placing immense pressure on children to achieve (Little, 1999; Sri Lanka National Education Commission, 2003).

Background: Education and Development in Bhutan

Until the early 1960's Bhutan was closed to the outside world. Education was limited to monastic teachings for a small number of boys, one from each family by choice. The need for Bhutan to modernise and develop was realised by the third King who introduced political, social and economic reforms including the first development plan and membership to the UN in 1971 (Royal Government of Bhutan Department of Planning, 2002b, p. 1). The country has approached modernisation and change with caution, drawing on Buddhist principles and basing its development philosophy on a metric of Gross National Happiness (Royal Government of Bhutan Department of Planning, 2002b; Ura and Galay, 2004). Poverty is related to a largely rural population (79 percent of the population are dependant on agriculture), remoteness of many communities with limited or no access to electricity, transport and communications and, increasingly, to growth in

[5] Peace remains the highest risk factor in the World Bank Country Assistance assessment Ibid.

unemployment. Education is free for all children up to Class 10, considered as completion of Basic Education. Growth in enrolment since 1990 has placed pressure on the system to provide sufficient classrooms and teachers to meet the demand. It is estimated that 72 percent of primary school age children were enrolled in school in 2001, only 69 percent of children who enter primary school complete the seven years of primary education and repetition rates are estimated to be between 12-13 percent each year. In addition to the 110,000 students studying in 382 schools and institutes in 2001 there were 5,000 students enrolled in the formal monastic order supported by the Royal Government and an estimated 10,000 children enrolled in village temples as private students (Royal Government of Bhutan Department of Planning, 2002b, pp. 67-74). On these estimates 18 out of every 100 children in Bhutan will achieve Grade X certification and only 5 percent of children will achieve Grade XII certification. The threshold for entry into further education in Bhutan is now a minimum Class X pass with examination scores used for selection. Formal post-primary school provision for many rural communities in Bhutan is problematic unless children board away from home. The estimated adult literacy rate in Bhutan is 54 percent (Royal Government of Bhutan National Statistical Bureau, 2004).

This low level of achievement on a certification metric is a result of low levels of system efficiency - low enrolment, high repetition rates and high dropout rates, with absorption capacity limited at upper secondary school level due to lack of physical facilities. The low level of system efficiency is partly a reflection of the relatively young stage of development of education in Bhutan - few children had access to basic education until the 1990's - and partly due to the challenge of providing education to all children in a small, widely dispersed population.

This brief introduction to education in the context of development for each country illustrates two different and contrasting stages. Bhutan's education system is in its infancy by comparison with Sri Lanka's longer history of basic education provision and its current tentative period of conflict-resolution, reconstruction and reconciliation. Both Bhutan and Sri Lanka face problems associated with youth unemployment and under-employment of graduates. Evaluation of trends in system performance and learning achievement do not generally account for such contextualising when based on standardised indicators of development.

Social Policy in Sri Lanka and Bhutan

A selection of basic statistics provides a general overview of the status of human

development and social policy in Bhutan and Sri Lanka. As a measure of economic growth Sri Lanka's per capita GNP increased from USD 850 in 1998 to USD 1160 in 2005 – an increase of 36.5 percent. Bhutan's per capita GNP increased from USD 450 in 1998 to USD 1250 in 2005 – an increase of 178 percent (UNESCO, 2007, p. 249). Bhutan is categorised as one of 50 Least Developed Countries according to the present listing from the Economic and Social Council of the United Nations (UNESCO, 2007, p. 235). The difference in demographics between the two countries is indicated by the total fertility rate (children per woman) 2005-2010 which is 3.8 in Bhutan and 1.9 in Sri Lanka (UNESCO, 2007, p. 248).

Using education expenditure as an indicator of social policy commitment, the proportion of national income spent on education was 2.9 percent in Sri Lanka compared to 5.2 percent in Bhutan; the proportion of government expenditure spent on education was 6.8 percent in Sri Lanka compared to 12.9 percent in Bhutan (World Bank, 2005, p. 34). Education is compulsory for Sri Lankan children aged 5 to 14 years old and for Bhutanese children aged 6 to 16 years old.

Bhutan has a legal guarantee of free education but charges are levied for public school attendance (Tomasevski, 2006, p. 115) including contribution towards the cost of school uniform, school building and stationery items (Tomasevski, 2006, p. 246). "Apart from a nominal fee of Nu 5 per annum per student, all schooling facilities are provided free[6]. In addition, schools collect from Nu 10 to Nu 300 per student per annum for the school development fund" (Tomasevski, 2006, p. 125). Sri Lanka does not have a legal guarantee of free education and does not levy charges for public school attendance (Tomasevski, 2006, p. 115). The abolition of charges for school attendance in Sri Lanka includes: a free textbook scheme since the 1950s; a free mid-day meal reintroduced in 1989; and a free school uniform provided since 1991. This contribution to social welfare is counterbalanced by the costs of war and diminished budgetary allocations for education which is formally traced back to 1983 (Tomasevski, 2006, p. 147).

The Global Monitoring Report 2007 provides a summary of the achievement of all countries signed up to achievement of Education for All by 2015. On three indicators Sri Lanka had achieved a primary Net Enrolment Rate (NER) of greater than 97 percent by 2005 (UNESCO, 2007, p. 180) and was also likely to achieve gender parity in secondary schools by 2005 (UNESCO, 2007, p. 184). Sri Lanka was among 28 countries at risk of

[6] 40 Bhutanese Ngultrum = 1 USD

not achieving an adult literacy rate of greater than 97 percent by 2015, categorised as moving towards the goal but progress was too slow (UNESCO, 2007, p. 182). On none of the three indicators does Bhutan have sufficient data available to be included in the analysis. Bhutan successfully reduced its pupil-teacher ratio (PTR) below the international benchmark of 40:1, reducing it from 42.1 in 1999 to 31.1 in 2005 (UNESCO, 2007, p. 77).

The limited range of comparable data available in this brief statistical overview further illustrates the problems of between-country performance-based analysis as discussed in Chapter 2. There is a clear need for supporting descriptive explanation, which it is not possible to address in detail within the limited scope of this study.

An alternative qualitative indicator of social policy towards education is provided by surveying the focus of key interventions, each of which is generally a collaboration between development partners and the respective Ministries of Education (Birdsall, Levine and Ibrahim, 2005 Appendix 3). In Sri Lanka for example there are externally-funded initiatives currently being implemented to modernise secondary education (Asian Development Bank), to enhance quality and relevance of under-graduate education (World Bank) and island-wide expansion in access to information technology linked to e-governance (Asian Development Bank and World Bank). The education policy in Sri Lanka is moving towards expansion of private sector schools and universities and an increased emphasis on orienting the school system to the world of work. Issues of diversity related to poverty and ethnicity are addressed through civic knowledge of democracy and civil liberties to promote social cohesion, for example through education (World Bank, 2005, p. E16). In Bhutan teacher training has recently been incorporated into the establishment of a national university (Helvetas/SDC funding), a sector wide review of education was initiated in 2006 (World Bank, UNICEF, Danida, Helvetas/SDC) and a pilot scheme has been introduced to explore opportunities for adults to complete basic education (Royal Government of Bhutan). The main focus of the national education policy in Bhutan is to reach the un-reached with strategies for inclusive education for children who are mentally or physically challenged, early childhood education and development of private sector education to meet the present shortage of education facilities (Royal Government of Bhutan Department of Planning 2004, pp. 23-24).

A brief analysis of the social policy scenarios further illustrates the variation in

opportunity and stage of development for learners in Sri Lanka and Bhutan. The near universal access to formal education in Sri Lanka is supplemented by widespread non-formal learning opportunity through private sector tuition, English and computer classes. Access to non-formal learning opportunity in Bhutan is provided free of charge through NFE classes, targeting both rural and urban over-age learners across the country. Despite social policy commitment to inclusive education for all children in both countries there is a lack of available information on the extent or degree of need and how this is distributed across the country. NGO activity in education provision and in social welfare support for increased access to education is further developed in Sri Lanka than in Bhutan though there are mechanisms in both countries to provide various scholarship and sponsorship opportunities for school attendance. In both countries the main social safety net is provided through extended family, community welfare schemes and the monastic body.

The background information about each study location is relevant in the context of the capability-based research focus as it not only provides the historical, social and environmental backdrop to the studies but serves to illustrate the different facets in the development of education systems and the characteristics of the child's formal and informal learning environments, which may impact on individual capabilities. The intention in this research is not to use the two different locations of Bhutan and Sri Lanka for comparative purposes but to use the evidence from them to analyse the range of perceptions of valued learning outcomes and to understand these in the context of individual capabilities to accomplish what is valued in relation to the reality of particular lives and livelihood opportunities. This level of qualitative detail is distinct from the quantitative information base generally used in performance-based evaluation. Local contextualisation is a key descriptive element of relevance-based evaluation though this information is generally used to describe community-level quality of life compared over time.

The Research Team

The research was conducted in first language Sinhala (Sri Lanka) and Dzongkha (Bhutan), to maximise participation and interaction by informants. A research facilitator and a translator, each with first language of the informants, were selected and trained by the researcher to accompany her throughout the fieldwork in both locations (Annex 6). The researcher observed and recorded all focus group discussions conducted by the research facilitator and translator throughout the field work period. The research facilitators and translators (Sri Lankan and Bhutanese) are local research and education

professionals. Both research facilitators were selected for their skills and experience in participatory interaction with villagers at local level (Annex 7).

Grounded theory requires that researchers are sensitised to the research context, which in this study includes knowledge of the local cultural context, an understanding of learning situations within and beyond the formal sector in rural developing country contexts, and a familiarity with theoretical and operational aspects of the capability approach. The professional and academic experience of the research team meets each of these requirements (Annex 7).

Methodological challenges include interpretation of meaning between informants and researcher, compounded in this study by the need to use translators and research assistants to work in the informants' first language. Furthermore "lay conceptions" (Strauss and Corbin, 1998, p. 172) had to be accommodated within the data collection methodology through sensitised approaches using skills of eliciting and probing, avoiding leading questions and prompts.

PROCESS OF DATA COLLECTION

Quantitative data was obtained from official government sources of statistical information (Annex 1 and 2) to describe the context using standard social and economic indicators such as school enrolment and dropout rates, rural-urban distribution and household poverty indicators. National statistics were accessed from the Ministry of Education Planning Office and from Central Bank Statistics websites (Central Statistical Office, 2001; Royal Government of Bhutan Planning Ministry, 2002). School level statistics were obtained from the schools and from the zonal and district education offices. Some errors in data validity and internal consistency were identified, for example inconsistency in information provided from central and local sources. The data was sufficient for the original purposes of selection of districts and schools based on the criteria of least advantaged rural communities and schools.

The qualitative data was drawn from focus group discussions and other participatory activities with a sample of primary and secondary informant groups (Annex 5) based on the rationale that a "chain of practical reasoning" would lead informants to identify and articulate learning outcomes which they value (Alkire, 2002, p. 224 and 226). The research team were trained in the qualitative research procedures using a Training Guide which had been prepared by the researcher (Annex 6). The Training Guide provides a

description of the background to the study context, the criteria used for sample selection, the instruments which were developed for data collection, checklists for addressing problems which could arise in the process of data collection and notes on research skills such as use of questioning, translation and protocols to be followed.

The research team were trained to be sensitive to the competence of informants to express their views, for example some of the unschooled parents were initially shy and intimidated. However, because discussion focused on people in the familiarity of their household situation, which itself revealed points of interest that may not have been heard through direct questioning, this helped the informants to relax. The insider-outsider barriers were largely overcome through good interpersonal skills of the research team and open-endedness of the research instruments.

A Semi-Structured Interview Guide was designed including open-ended questions (Annex 8) aimed at eliciting the views of informant groups on the ways in which learning impacted on their lives. Draft questions were reviewed by professional colleagues in Sri Lanka. The questions were carefully reviewed by the research team during the early stage of field work and minor adjustments made in the way they were introduced into the discussion forum (Annex 9). The questions were intended to enable wide ranging discussion about local learning environments, learning opportunities experienced in the home and the community as well as formal school learning, and some indication of the value given to the various learning opportunities and the learning choices that children and their parents experienced compared to their hopes and aspirations. These topic were not introduced through direct questioning but rather through participatory discussion as this approach was considered to be appropriate to the particular target group.

The semi-structured focus group discussion was designed to elicit, from informants, their view of what it is important for 14 year old children to learn, as a proxy or lay description of valued learning outcomes. The research team accepted as valid all ideas put forward in discussion. Informants were encouraged, through discussion, to explain the reasons behind their list of valued learning outcomes which included description of lost opportunities, rationale for decisions taken by individuals for example to send children to school or not, expectations of individuals arising from learning opportunities, realistic or not, and capabilities enhanced through various channels of learning including intergenerational transfer of livelihood skills. Multiple voices were heard and interpreted conceptually, conforming with grounded theory methodology, enhanced by the theoretical sensitivity of the research team having lived and worked within the

communities being studied. The methodology consequently enabled "multiple realisabilities" to be identified and described, as well as capabilities associated with learning which was "concretely specified in accordance with local beliefs and circumstances" (Nussbaum, 2000, p. 77).

Focus group discussion was used because of the advantages of creating opportunity for participation and interaction between groups of villagers rather than imposing a formalised interview structure. The former was considered to be less threatening and more familiar to the informants as a similar approach is used in village meetings, including invitation by the head teacher or village headman for attendance. All focus group discussions were tape recorded and transcribed, in addition to field notes kept by the researcher from direct simultaneous translation and flipchart records. Some examples of researcher notes from simultaneous translation and notes transcribed from tape recordings are included in Annex 10. This enabled cross-referencing of translated information for clarification. Some translations were lost due to translator participation in the discussions. Occasionally, at points in the discussion where the translator considered that it was not appropriate, personal or sensitive issues were not translated. These missing facts were usually covered in team debriefing sessions after the conclusion of each discussion.

The Research Tools

The Semi-Structured Interview Guide (Annex 8) was designed to provide sufficient focus in relation to the topic without closing the boundaries of what might emerge during discussion. It is compliant with the capability approach in capturing, as broadly as possible, the diversity of informant perspectives. Research team training in application of the semi-structured approach was essential to ensure that boundaries remained open as a critical element of the research approach. The interview structure was trialled in the first two focus group discussions with children and parents and revised by the research team (Annex 9). It incorporated a simple process for ranking of valued learning outcomes in which informants were invited to consider which were the most important of the learning outcomes they described and why.

Several intentional and unintentional variations arose in the methodology used to gather data between the different informant groups. In all the Sri Lanka focus group discussions with school attending groups of Grade 9 students, flipcharts were used to gather and organise the information which had the advantage of structuring and focusing the

discussion ensuring that the same information was comprehensively collected from each group. Flipcharts were a convenient format through which to invite the informants to rank valued learning outcomes (Annex 16, Chart 2, 3 and 3a). Each discussion group was invited to rank the three most important valued learning outcomes from their suggested lists of learning in the home, at school, with friends and in the community. Where there were differences of opinion a simple consensus was reached through discussion.

Flipcharts were not used in any of the focus group discussions involving informants with low levels of literacy and in sessions with smaller groups of 1-2 informants - non-attending children and most parent groups – because it was apparent that participants were not confident in using the written word. In the Bhutan study the research facilitator also advised that the recording of discussion points as brief notes or bullet points is linguistically problematic. In these non-flipcharted discussions the interview guide provided structure but the resulting discussion was less structured. The less structured discussions provided richer data in some respects, but generalisability was lessened and vice versa for the more structured discussion groups. In the non-flipcharted sessions the emphasis and animation generated in discussion provided an indication of the priorities or ranking which informants placed on the various learning outcomes. Both ranking methods are informal and are not intended to be rigorous beyond capturing local perspectives and opinion. Ranking was based on the rationale that more sophisticated measures would lose the elements of naturalistic enquiry, being less practical and applicable to these particular local contexts.

Mapping of learning pathways was used to capture recollections of the significant learning events for individuals from the primary informant group of 14 year old children and their parents. Changes over the generations in valued learning and living conditions were discussed. Livelihood opportunities and aspirations were recorded and a village mapping exercise was used to capture information about valued learning locations and knowledgeably skilled people in the community (Lave and Wenger, 2002, p. 47). The mapping exercise was only used in the Sri Lanka sample as it inhibited responses from some participants, for example those who were reluctant to hold a pencil, and was less productive and inclusive than open discussion. Group size varied between 2-7 people with 4-6 as the ideal and invited group size.

APPROACH TO ANALYSIS

The data analysis was designed to seek answers to the research questions using the

capability approach as a framework. The aim was to generate generic dimensions of learning through which to analyse and present pluralities of learning outcome and capability. In this way substantive meaning would not be lost through categorisation and aggregation of information. Though the data sets were inevitably incomplete, rigour was applied in data analysis to avoid ambiguity by generating definitions of valued learning outcome and capability from the data. This process was intended to allow more comprehensive definition than in performance-based approaches, with more structure than relevance-based approaches.

Each of five stages in qualitative data analysis have been used in this study, described by Richie and Spencer in their framework approach to applied social policy research (1994). They are (i) familiarisation, (ii) identification of a thematic framework, (iii) indexing, (iv) charting, and (v) mapping and interpretation.

The first stage of familiarisation began during data collection and progressed through the reading of translated transcripts of focus group discussion sessions. This stage was important in clarifying the key ideas emerging from discussions, some of which could otherwise have been lost or obscured through the process of simultaneous translation. Linkages between data provided by each informant group began to emerge.

The emergent process of developing a conceptual or thematic framework was akin to the naturalistic enquiry process of inductive data analysis or content analysis (Lincoln and Guba, 1984, pp. 202-203) and was used as a technique of grounded theory. The process was essentially designed to uncover and make explicit embedded information. In this study the conceptual framework was structured around evaluation of learning as enhancement or restriction to individual development. The Semi-Structured Interview Guide outlined pre-determined elements for the development of the conceptual framework, including identification of learning environments (home, school, friends and community), learners aspirations, local formal and informal learning opportunities and individual's knowledge about the entry level qualification requirements.

The two stages of indexing and charting were combined as one process of coding and managing the data. Lincoln and Guba (1984) use the terms unitising and categorising to describe the processes of transforming, aggregating and organising data. A unit is a discrete piece of information which is interpretable in the absence of any additional information. In contrast to the process of transforming data through the unitising and coding process which aggregates and de-contextualises, there may also be a rich data

source from combining larger bundles of information which have a specific relationship. For example horizontal data was collected in separate focus group discussions from a child and her mother and/or her father. Vertical data collection included cases where individuals introduced topics such as participation in their own or their child's learning and other topics such as lack of access to information were implicit in informant's responses. The collation of these horizontal and vertical data sets provided a basis for transforming the data from substantive, rich reporting of the particular to generation of grounded generic dimensions of valued learning outcome and capability, and learner profiles.

In the final stage of mapping and interpretation "the serious and systematic process of detection" began, including defining of concepts, mapping the range and nature of phenomena, creating typologies, finding associations, providing explanations and developing strategies (Huberman and Miles, 2002, p. 320). The Sri Lanka study analysis began the process of concept definition from the local perspective, in particular the emerging dimensions of valued learning outcome and associated conceptualisation of capability. The diversity both between and within populations began to be defined, for example patterns of response from children attending school and their non-attending peers. Practical application of learned knowledge and skills began to be mapped into typologies of learning outcome including performance-based indicators of achievement such as examination results and school completion and relevance-based indicators of local knowledge and skills. The ultimate aim was to develop a better understanding of valued learning mapped onto perceptions of capability ie the realities about the ways in which learning can make a difference to people's lives as the freedoms one has to lead a life one has reason to value.

The analysis drew out the "emergent issues raised by the respondents themselves, and analytical themes arising from the recurrence or patterning of particular views or experiences" (Huberman and Miles, 2002, p. 313). Factors that enhanced or restricted valued learning outcomes within formal and informal learning situations were identified as perceived by the informant groups and these were mapped onto a structure of generic dimensions of valued learning as the first stage in developing a capability-based evaluation framework.

Coding Categories

Applying a capability-based approach, the generation of the list started from analysis of

raw data from informants perspectives of learning outcomes (functioning) from which opportunities to improve lives through learning (capability) could be inferred.

Preparation of the qualitative data for analysis followed grounded theory procedures for coding, using constant comparison to reorganise and re-code groups. Coding was used in this study to analyse patterns in response between different groups of informants and to draw out generic dimensions of valued learning outcome, the purpose being "to aggregate all data about the same topic or theme so that each category can be studied individually" (Tesch, 1990, p. 90). Grounded theory methodology of iterative coding of data was used to create new theory (Tesch, 1990, p. 65). Coding procedure, correctly adhered to, allowed the researcher to select from "multiple voices" which achieved the aim of including diverse perspectives within generic dimensions of capability. The process required subjective judgements and interpretations to be made which, by using descriptive reporting, are open to the scrutiny of others.

The rich descriptive data was coded and used to build up case studies of individual children presented in Chapters 5 and 6. Analysis of data grouped under themes such as future aspirations of learner groups was reported in Chapter 7, including examples of positive and negative learning outcome and the perceived instrumental, intrinsic and positional value of learning. These themes were elicited from the semi-structured questions used in the focus group discussion data rather than being identified through the use of direct questioning.

Coding categories identified in the Sri Lanka and Bhutan research data analysis were tabulated for comparison (Annex 11, Table 21 to 23). Headings evolved and became generic dimensions of learning outcome through detailed analysis and interpretation of the findings using a procedural approach, reported in Chapter 8 (Robeyns, 2003). The subcategories of information accumulated under each category heading represented and reflected the concern for diversity and multiple realisabilities. The statements of 'valued learning' from each informant group were re-organised to reveal patterns in responses by gender group, school attenders/non-attenders, children/parents and urban/rural.

After coding and reorganising the data, the broad dimensions of valued learning outcomes and capability were used to define a list of generic dimensions (Chapter 8). Through this process the study became grounded to inform the development of a new metric and for future application of a capability-based approach to the evaluation of other populations but with the scope to expand and re-focus according to locally identified perspectives and

values. For example a broad category of 'new technology' includes particular categories of electricity (household) and driving a tractor (farm / livelihood), with emerging issues of access to information and financial security. Access to information is also an emerging issue in relation to local knowledge of training opportunities and risk of exploitation in the workplace or school. The generic dimensions were substantiated by the localised sub-categories. This corresponds to the capability approach conceptualisation of the evaluative space as a measure of individual freedom containing multiple realisabilities (Nussbaum, 2000, p. 77) which reflect pluralities and diversity within and between populations.

Further analysis of the rich descriptive data from individuals provided the basis for development of the theory on social policy commitment and individual entitlement presented in Chapter 9. Again the information was elicited from the semi-structured questions used in the focus group discussions combined with background knowledge of the social policy contexts.

The coding and analysis procedure is described further in Annex 11.

ETHICAL CONSIDERATIONS

The key areas of ethical concern in this research were informant expectations about participation, clarity of communication between researcher and informants, and use of information provided by the informants. A letter to participants was prepared in local language and circulated to school head teachers and to the parents of children participating in the study (Annex 12 – local language Dzongkha and Sinhala versions and English translation). The letter also included a consent form giving parental permission for children to be included in the discussion groups. The invitation was sent out to families through the school, having first been approved at district level where the access to schools and to contact with parents and children was agreed. In the Bhutan sample the village elder was also involved in calling parents to attend the meeting, which was unavoidable in terms of local protocol. In these circumstances parents had little choice but to attend and, while this was not ideal, it was accepted by the researcher as the local norm.

In addition to the written information, participants were also informed of the purpose of the meeting in the introduction to each session. Cultural sensitivity was addressed through personal knowledge of the researcher. The use of translator and research facilitator

ensured that information was exchanged through first language, with the exception of one community in which a different language was spoken, unique to that community. In that case one person from the parent group and one child in the 14 year old group was able to communicate sufficiently in the language of the research facilitator to act as spokesperson. Both research facilitators and translators were sensitive to the issues of confidentiality of information which was included in the training provided by the researcher as preparation for the field work (Annex 6). At the start of each discussion the research facilitator explained that any information they shared would be treated confidentially for the sole purpose of this research. Some issues of personal sensitivity were not recorded and on several occasions translations of sensitive information were not recorded.

Participants were made to feel that their contributions were valued and that the time given was appreciated. In some instances parents on contract labour were compensated by the researcher for loss of a day's pay and all groups were offered refreshments. Debriefing was undertaken by the researcher separately with each head teacher, the district education officer and, in Bhutan, with the Education Minister (Annex 13). All data was referenced and pseudonyms used in the thesis to maintain anonymity of the informants (Annex 14).

ISSUES OF GENERALISABILITY

Generalisability and internal and external validity of research findings have their origins in traditional quantitative methodology (Huberman and Miles, 2002, pp. 171-174). The development of qualitative research methodologies since the 1970's has seen a shift from the earlier strong rejection of generalisability as irrelevant in studies which emphasise diversity and non-statistical sampling, towards a conceptualisation of generalisability which can be applied in qualitative research (Huberman and Miles, 2002, pp. 175-177). Five criteria are reviewed to ensure quality in the research methodology: credibility, transferability, dependability, confirmability and authenticity (Mertens, 2005, pp. 254-258).

Credibility refers to the match between social constructs of informants and the presentation of informant perspectives by the evaluator. In this study credibility has been sought through open discussion between the members of the research team, through peer debriefing and triangulation to cross-check the information from interview notes, transcripts and comparison between primary and secondary informant discussion (Annex 15).

Transferability has been ensured through provision of "thick description" of the specific sites and participants presented through case studies, quotations and profiles of individuals and their local learning environments, with generalisation to other contexts handed to the reader. In this study an issue of "transferability" in the generalisation process is illustrated by the description of variation in stage of development of school systems. For example, enrolment and literacy rates are much higher in Sri Lanka than in Bhutan and the majority of adults are literate in rural Sri Lanka (8 percent illiteracy) in contrast to Bhutan where the estimated literacy rate in 2002 was 54 percent with women's literacy as low as 20 percent. Similarly social, economic and historical 'life cycle' factors within families and within community groups also affect generalisability (Huberman and Miles, 2002, p. 188) and change over a lifetime, for example, the opportunity costs of education for a family with young and elderly dependents differs when the children are older and independent. The Bhutan analysis illustrates the ways in which the extended family arrangement enables older siblings and grandparents to act in loco parentis when children move away from the village to attend boarding school. In contrast the Sri Lankan analysis includes examples of families in which one parent lives overseas as a migrant worker for a period of years.

Dependability is satisfied through description of the process which in this study includes the selection and training of the research team (Annex 6 and 7) and the procedure used to define the generic dimensions of capability (Chapter 8). Confirmability, as the assurance that data can be traced back to its source, is provided through documentary evidence including scripts and tape recordings with translated quotes included in the thick description with references to the originator of each discussion point (Annex 10 and 15). Authenticity calls for fair representation of views which in this study aims as far as possible to be inclusive of all views including facilitator techniques to encourage all informants to contribute to the discussion.

Fittingness has also been used as a term to re-conceptualise generalisability in qualitative research, for example where the degree of match between situations can be studied including the match between temporal and contextual factors (Lincoln and Guba, 1984). The more concrete factors and the more accessible factors in this research are easily matched between contexts, for example specific livelihood skills and home-making knowledge, school learning achievements, and historical developments in education and learning can be matched within and between populations. However, in this study fittingness may be used as a descriptor for identification of the characteristics of a particular population rather than for the purposes of identifying comparable samples.

Abstract information is more difficult to match within or between populations, in particular the attitudinal factors such as individual interpretations of valued learning. A highly ranked valued learning outcome identified in the Sri Lanka study is 'knowing what is good and what is bad'. However, the meaning in terms of what is learned and how it is learned may vary widely between cultures. In this case "naturalistic generalisation" is a more logical approach (Stake, 1975) in which one factor such as moral education can be taken from one study and re-interpreted in the particular contexts of other similar studies. This is the basis for developing generic dimensions of valued learning outcome and capability which allow for evaluation of multiple realisabilities and the capturing of pluralities and diversity.

All the above issues of generalisability rely on clear, unambiguous and detailed information and definitions. An issue that has been acknowledged in this research, which had the potential either to strengthen or to undermine internal validity, is that the researcher was reliant on research facilitators and translators in the data collection process. Transcriptions of tape recordings and flipcharted sessions safeguarded validity to some extent. Weaknesses in the research facilitator's questioning style and translator accuracy included too close engagement with the discussion at times and personal re-interpretation of the informants' responses. These errors were corrected as far as possible through a combination of practice sessions, on-going team discussion throughout the field research period, de-briefing and review at the end of each day, and researcher intervention during focus group discussion.

CONCLUSION

The research methodology was designed to maximise the capturing of local perspectives to explore means by which valued learning and capability can be evaluated in relation to individual freedom to be and to do. The following chapters draw on qualitative empirical data from the studies to begin to address the challenges of measurement of capability as a complementary methodology to performance-based and relevance-based evaluation of learning outcome, informed by the capability approach. Chapters 5 to 8 respond to Research Question 2 "What lessons can be learned from empirical data on local perspectives of valued learning outcome in contexts of rural poverty to inform an understanding of the influence of social policy on the basic capability of an individual to be educated and to improve her quality of life through learning?". Each chapter seeks to identify the lessons to be learned from the empirical data on valued learning outcome and human development in contexts of rural poverty, relating to particular aspects in the

evaluation of capability. The analysis informs an understanding of the influence of social policy on the basic capability of an individual to be educated and to improve her quality of life through learning.

In Chapter 5 learning profiles of four siblings are used as case studies to explore variations in learning opportunity as individual freedom to develop, illustrating inequalities in condition and the influence of social policy on individual achievement. Chapter 6 uses individual capability profiles of two girls from one village – one who attends school and another of the same age who does not attend school. The Bhutan and Sri Lanka case studies contextualise some of the capability approach concepts and provide the scope to compare each child's learning outcomes against the performance-based, relevance-based and capability-based evaluation methodologies. Chapter 7 examines the value of learning from the perspectives of different learner groups , analysing the perceived instrumental, intrinsic and positional benefits and range of choice for each learner group. Chapter 8 endeavours to categorise the qualitative rich description into generic dimensions of learning and capability, applying a procedural approach.

In response to Research Question 3 "Can an improved indicator framework be developed for the evaluation of learning outcome that goes beyond the limits of existing indicator methodology?", analysis of the empirical data is drawn together in Chapter 9 illustrating ways in which the capability approach can contribute to the development of an improved indicator framework for the evaluation of learning outcome. This final stage of data analysis draws together the key indicators of learning and capability focused at the institutional level on delivery of social policy commitments by policy makers and service providers, and at the individual level on fulfilment of individual entitlement.

The structure of the analysis chapters provides a means of comparing evaluation methodologies at both macro and micro level. The data is analysed from particular individual perspectives and is consolidated into a generalisable framework of capability indicators.

Chapter 5. Individual Freedom to Learn

INTRODUCTION

In this chapter the data is analysed through a case study to consider ways in which individual freedoms and opportunities to learn can be evaluated. The learning experiences of four children are used to explore ways in which each individual's basic capability to be educated can be evaluated and how learning which is foundational to enhancement of other basic capabilities can be identified. Valued learning outcomes are interpreted as any learning which the children and their parents identify as important in contributing to an improvement in their lives and which therefore enhance their individual capability. The constraints to learning, which constitute individual capability deprivation, are also identified.

The analysis is approached from several different perspectives. The formal and informal learning opportunities of the individual children are presented and are then discussed in relation to the influence of social policy on an individual's freedom to learn. Broad learning contexts are described, providing a framework for evaluation of diverse learning opportunities including school and other-than-school learning. This analysis begins to map out some general indicators for the evaluation of learning outcome and learning-related capability as individual freedom to learn.

The analysis draws out several points in the evaluation of learning outcomes and capability.

First, the range of choice for formal and informal learning opportunity is described in this chapter, indicative of the vectors of potential functioning ie. the various pathways which may be chosen through which individuals have the freedom to expand their capability. The range of learning pathways and opportunities can be identified by policy makers and accorded value where such opportunities enable individuals to improve their quality of life. The range of opportunity will vary according to time and place and may be used to map local development opportunity as a metric of individual freedom to learn. Some informal learning opportunities, such as improved awareness of good health practices is of benefit any underdeveloped community, universally valued by development partners as having the potential to enhance individual basic capability. Other informal learning opportunities are specific to or tailored to the locality based on local values such as religious practices which are underpinned by universal values, also with the potential to

enhance individual basic capability.

Second, the analysis of individual freedom to learn is qualitatively defined and evaluated from empirical evidence, drawn from local perspectives based on personal experiences. The perspective is cross-sectoral, indicating the inter-connectivity of learning opportunity and related outcomes which integrate health, natural resources, education and non-formal sectors, for example. The evaluation reflects diversities and pluralities in the way individuals convert learning into improved well-being.

Third, analysis of individual freedom to learn can provide insights into the influence of social policy on learning outcome and improved quality of life. The learning environments will vary between populations depending not only on local relevance and demand, or social and economic circumstances but also, and more critical to the capability-based approach, depending on social policy. Evaluation which is sensitive to the effect of social policy on individual learning outcome and capability will be able to capture the real deprivations experienced among some populations such as excluded or exploited groups, uninformed groups, disempowered groups and economically vulnerable groups.

CASE STUDY – INDIVIDUAL PROFILES

This case study focuses on the different learning outcomes of four children from one extended family living in situations of relative poverty in a remote rural location in Bhutan. These children were chosen as the focus for the case study analysis because they come from very close family connections yet they had experienced different learning opportunity, providing evidence of diversity in freedom to learn and learning outcome. Though their learning experiences and related opportunity or capability deprivation differed, the background of social policy, social and economic infrastructure was similar. Pseudonyms are used for all case study individuals. The profiles are created directly from informant descriptions.

DECHEN

Dechen was a 17 year old NFE (Non-Formal Education) student. She had an older sister and a younger brother and sister. Her younger brother, Wangchuk, attended the local community school in the village. Dechen and her sisters did not attend school though she did not know why this was.

Dechen attended the NFE classes which were held in the community school for two hours once a week after school hours. There were 23 students in the class from age 12 to 25 years old, including only 4 boys.

> We have been attending NFE classes for 2 years now but we don't know whether we have finished the course. We haven't got a certificate yet.

According to the NFE teacher, the students had completed the course and the examination and she was awaiting the arrival of the post-literacy course books to start the follow-on programme. Dechen did not seem to be aware of this. Dechen's comment captures two aspects of capability deprivation. One is the limited access she had to participation in her own process of learning through lack of information sharing; second, her inference that a certificate validates learning and indicates a closure to a phase of learning.

The NFE teacher commented that the class had been taught how to complete an application form and had acquired basic literacy and numeracy skills. Dechen and her class mates demonstrated that they could write their names and could calculate three digit addition and subtraction algorithms correctly using pencil and paper and a calculator. She recalled that she had learned about mother and child health care, cleanliness and hygiene, agriculture and forestry, and facts about her country. She said that she could borrow books to read at home but she could not keep the books. The NFE teacher said that the students could not keep the books because they don't take care of them.

The apparent exclusion of Dechen and her sisters from formal education opportunity was a capability deprivation influenced by cultural and environmental factors. The main reason why Dechen did not attend school was that the community school that her brother Wangchuk attended was not constructed when Dechen was primary school age, the primary school was too far to go as a young girl and later she was too old to enrol in primary classes. Dechen and her father stated that primary school attendance would have been their preference. Dechen's father had, as village head-man, been one of the main initiators of development and change in the locality including construction of the community school from which Wangchuk and future generations would benefit, and introduction of the NFE classes from which Dechen benefited. He explained:

> Small children could not join the (primary) school because of the distance (2 hours walk) and the river becomes swollen in the summer months. Those who couldn't join school before have joined the NFE class. The plan is for the older

> children to complete NFE classes and for the younger children to enrol in the community school to complete Class VI.

Another reason was the perceived value of school for Dechen as a girl child who would inherit the family property in contrast to Wangchuk who, as a boy child, was more likely to seek paid employment opportunities in future. Furthermore, Dechen was needed to help with the potato work which was time consuming. Her mother did not know what jobs children might be able to get if they completed school. She knew that only a few got jobs. The others had to come back to the village so they had to know the village work. Dechen's grandmother noted that "school may be a good thing, I can't say, but the school doesn't get food from the government to feed the children" implying that this was an education cost factor to be borne by the family.

Dechen's parents were potato farmers and yak herders. Potato growing is labour intensive at harvest time and yak herding is migratory between summer and winter pastures, adding a complication to school attendance. Dechen helped her parents to look after the farm, dividing her time between the yak pastures and managing the work at home in the potato fields. She had learned the skills of farming from various family members. Her aspiration was to stay at home and continue to work on the family farm because, she said, this is something she knows how to do.

Neither Dechen's mother nor grandmother had the opportunity to go to school. Dechen's grandmother said:

> No-one studied before the primary school was constructed 25 years ago. I don't know anyone of my age who went to school. No-one studied before and no-one went away. Some boys went into the army and some went to the monastic school.

Dechen's NFE teacher was one of the only villagers to go away from the village to attend school and to return to the village with an education. She went away to school because her older, uneducated sister married a teacher and she was able to live with them to attend primary school. She lived with her aunt in the capital to complete secondary school Class X. She returned to the village because there was no-one to take care of her parents. She pointed out that:

> People who are here (in the village) only studied to Class 1 or didn't go to

> school. Some studied with the Gomchen (lay monk) in the non-formal training centre in the village temple. They learned to read the prayers.

On gender balance, while the local community school had achieved gender parity in enrolment there were significantly more girls than boys enrolled in Dechen's NFE class and at least one boy from each family in Dechen's community was enrolled in the formal or non-formal monastic school, continuing a tradition which pre-dates modern education.

WANGCHUK

Dechen's 14 year old brother, Wangchuk, studied in Class V at the local community school. It took him 20 minutes to walk to the school. If he successfully completed Class VI examinations the following year he would be able to continue his formal education. If he chose to continue formal education, he would have to transfer to the nearest lower secondary school which was a one day journey away from his village where he would have to become a boarding student. Wangchuk summarised what he saw as the value of school learning:

> Maths is useful when we have to travel to the town for shopping and to the border town to sell the potatoes at auction. Dzongkha (the national language) is useful for reading prayers and English is useful for giving speeches.

In addition to school studies, Wangchuk was developing a range of other functional skills and knowledge useful to his everyday life and to the enhancement of his capability. He had learned to recite Buddhist prayers from a lay-monk in the village. He had learned the potato business and basket-making for income-generation from members of his family.

> I learned to make bamboo baskets last year. Father knows how to weave bamboo hats and will teach me next winter vacation. He takes the baskets to the road-head village to sell.

Wangchuk had learned the whole process of planting, harvesting, packing and transporting potatoes to market including driving the power tiller and hiring the truck. He hoped to learn about vehicle mechanics in the future. He cooked food for the family in the mornings, took care of the pigs before school and at weekends he went up to yak pastures where the family keep their yaks during the summer months. He knew how to slaughter yak and how to dry the meat for food during the winter months. He aspired to become a

teacher or a forest guard and, though he could do the farm work, he would choose not to.

Wangchuk's learning experiences tell their own story relating to exposure to the world beyond his home valley. Each Bhutanese New Year he and his family travelled to the nearest market town, a two hour walk to the road-head and then four hours by public transport in a once weekly market truck. He commented that only there had he seen people putting fuel into vehicles and had watched TV in a shop. Wangchuk, who lived in an environmental conservation area, was impressed by the animals he saw on TV. Some of the concepts in his school textbooks were based on more sophisticated and technologically advanced images than these, such as air travel and aeroplanes, and computers that he had heard about on the radio but had never seen; concepts that were far beyond his life experience and with which he somehow had to identify; inequalities based on exposure and world view affected by Wangchuck's relative limitation in access to information. An issue in the evaluation is how exposure and world view can be measured with one possible metric being a measure of informal and formal access to information, in this case through media and travel. Wangchuk said:

> We heard about computers from the radio but I haven't seen one. Everyone has a radio at home to listen to the news. There is no TV or telephone in this village. I have seen a telephone but I have never used one. Four times a copy of the Kuensel (weekly national newspaper) was brought to school for us to read.

In a discussion among a group of four mothers, including Wangchuk's mother, they implied that their very limited exposure to the wider world and to learning had affected their own capability. This perception of "learnedness" may be evaluated in relation to societal characteristics and norms, similar to Broadfoot's distinction between "complex" and "simple" societies (1996, pp. 27-28). One mother said she had never travelled outside the village and so she knew nothing. Another had occasionally been as far as the road-head 2 hours walk away for shopping. Wangchuk's mother had been to the capital city several times in her life, and the fourth member of the discussion group had travelled annually to the border town to sell potatoes. Through her travels she had learned, as a second language, the national language which is used in the market place but is rarely spoken in her village. The national language and English are used in school as the medium of instruction and the national language is used as the medium of instruction in the NFE classes. Unschooled mothers and their children face a communication barrier and a capability constraint where the home language is neither the national language nor the language of school instruction.

Dechen and Wangchuk's grandmother indicated that she did not participate in the learning of her grandchildren.

> They don't talk about what they do at school; they just study and don't talk about it. Wangchuk studies; he doesn't do any work at home.

This illustrates another capability constraint in which limitations in the partnership between the home, the local community and the school can result in lost opportunity for the learner.

TASHI

Dechen and Wangchuk have a half-brother, Tashi, from the same village who shares the same father. Tashi was 23 years old. When he was 10 years old he migrated from the village to the capital city for his basic education, staying with his father's brother who was employed by the Royal Family through feudal family links from the recent past. When Tashi completed basic education (Class X), aged 21, he returned to the road-head village where he set up a small shop – his home village was two hours walk beyond the road-head. Tashi's home village had only 12 houses and the road-head bazaar area had approximately 50 scattered households. Supplies for his shop were transported up from India, two days drive away, when the potato trucks and timber trucks returned, otherwise empty. He had been able to save towards the purchase of solar power for household lighting and a power-tiller for local transport. Four public telephones were installed in the road-head village in 2005 – one in Tashi's shop, one in the school, one in the basic health unit and one in the tourist guest house. None of these services were available at that time in Tashi's home village. Tashi's shop had become a meeting point for communication and information exchange among the villagers.

Tashi had acquired the basic skills required to set up a small business and was well-placed to benefit from development opportunities in the local economy. He had access to markets and had good knowledge of local needs. He was in a good position to take a leadership role in the local community, not necessarily as village head-man like his father because of raised education requirements, but as a focal point in the village because he was one of the highest educated people in the community and because the shop had become a natural meeting place for the villagers. With completion of a basic education Tashi was also in a position to exploit new technologies as they were extended into the rural communities. If he chose to, Tashi could apply his education to develop local

opportunities in the expansion of communications, transportation, tourism, sustainable energy generation or rural finance management all of which have potential in the plans of development leaders (government, international agencies and NGO's). While his basic capability was established with completion of basic education, the pathway he follows in future depends on his choice and personal disposition towards conversion of learning into improved living through a range of opportunities as well as from external motivators such as social policy interventions as drivers of change.

LEKI

Leki is from the same extended family as Dechen, Wangchuk and Tashi. He was 17 years old, studying in lower secondary school, Class VII. He started school aged 10 years old when he was considered old enough to undertake the two hour walk to and from the primary school at the road-head, prior to the construction of the village community school. On completion of primary school (Class VI) he had no choice but to leave school or transfer to the nearest lower secondary school a one day walk away from his village, as a boarding student. Leki observed that it was easier to study at boarding school because there was more time to relax. At home in the village there was always a lot of work to do and little time for study. It was very tiring and difficult to concentrate on studies, he said.

> In my home village there were no rules. Here you have to live by the rules. In a way it is good because here we can study. In the village, going home in the evening there was a lot of work to be done and, being tired, we couldn't concentrate on our studies.

Some of the non-financial instrumental benefits Leki observed from boarding school were that food, health and solar power were all better than at home in the village, but that at school the water supply was more problematic than at home where the family had its own clean mountain source. Boarding school would not have been the family's preference because of the problem of children becoming sick and needing care.

Leki was a non-attender up to the age of ten, through circumstance rather than choice, because at that time the primary school was too far away for a small child to walk each day and the village community school had not yet been constructed. By the time Leki was due to complete basic education (Class X) in a minimum of four years time he would be 21 years old. At that stage, if he passed the Class X examinations, he could choose to continue his education or he could return to the village. To gain entry into the main

professions such as teaching and engineering he would have to complete Class XII by which time he would be 23 years old. He was aware of the reality of his employment prospects, in part through the government-driven advocacy programme promoting the concept of the educated farmer and encouragement for young people to return to the villages rather than towards urban migration. Leki aspired to become a teacher or government driver. He said he would be disappointed to return to the village but was confident that, if other options are not possible, he could apply the lessons he had learned at school and improve his family situation, as a positive outcome.

> If I have to, I can go back to work at home because I can apply all the things I have learned about farming and other things … like shopping calculations, paying the bills and interest repayments in maths – even learning how to cooperate will help when we are working in the fields.

Leki already demonstrated greater worldliness in his responses, demonstrating more awareness of employment opportunities than his brother Wangchuk was able to identify. In response to the question "What job opportunities are there for children with Class X pass and Class XII pass?" Wangchuk's discussion group response (précised) was:

> Without Class X pass you can be a sweeper, cook or clerk. With Class X pass you can become a village leader. With Class XII pass you can go on to study to become a teacher, a doctor or a nurse.

In contrast, Leki's discussion group response (précised) reflected awareness of a broader range of opportunities:

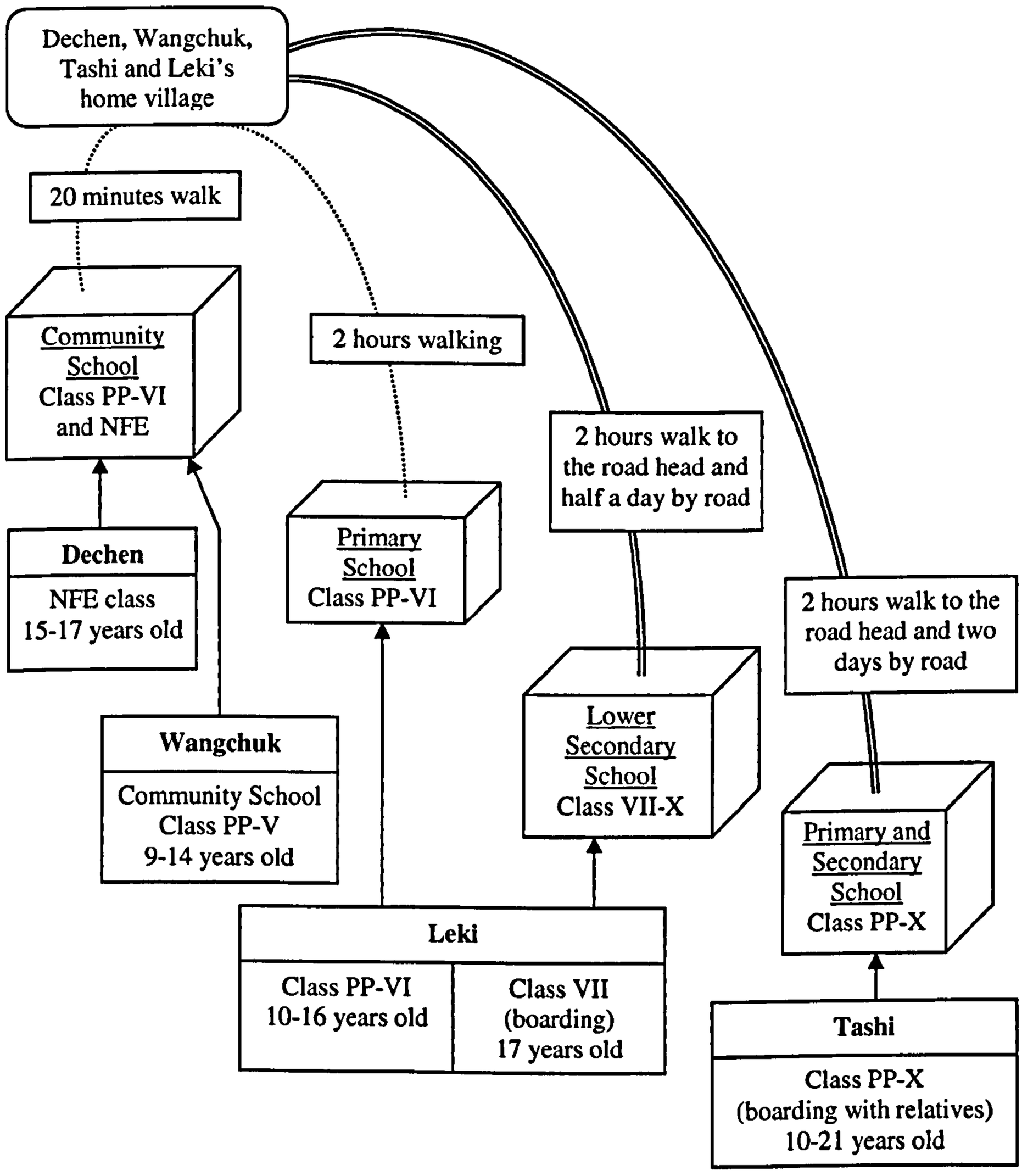
> Before Class X you can work in the private sector, farming or low skilled work like driver, sweeper or messenger. After passing Class X you can work in forestry, join the army or become a driver.
>
> After Class XII you can study to become a teacher, engineer, doctor, work in animal husbandry, agriculture or become an assistant engineer.

These perspectives may be age related or may reflect Leki's broader experience having moved outside the valley for lower secondary schooling. Leki and his family chose the option for him to continue his education as a boarding student, aware of the opportunity cost to the family as he was not able to help with and learn the seasonal work on the land.

They had raised expectations of the benefits of school learning in terms of future improvement in his life and that of his family. These benefits are typically measured in terms of instrumental value that Leki may gain a good job and a good income. The added benefits which Leki, Tashi and the NFE teacher Wangmo bring back to their isolated home community include all the added value of wider exposure including access to information and to networks of people, in contrast to the limited experience of other family members reflecting their under-exposure to the wider world.

Diagram 1 illustrates the contrasting formal learning experiences of Dechen, Wangchuk, Leki and Tashi, showing the variation in school-to-home location and age of attendance for four children from one family.

Diagram 1. Relationships between school and home locations and age of attendance in formal learning



The implication from this case study is that standardised evaluation of learning outcome would not be able to report on the variation in freedom to learn and the consequent learning outcomes and potential of each individual to improve their quality of life through formal learning opportunity. Constraints are recognised, for example Dechen's capability is enhanced through literacy skills but her capability is constrained by lack of information and limited access to learning resources. This reflects the fact that standard measurement of learning outcome, typified by performance-based evaluation, is driven by the need to quantify impact and return on system level investment but does not build a composite and comprehensive qualitative picture of the extent to which learning, including informal learning outcomes, actually improves individual lives. A relevance-based evaluation would capture diversity without seeking the connections of learning outcome to future opportunity or capability to improve ones life through learning. For example, the connections for Dechen's future opportunity could be access to a library, to skills for improved household maintenance, financial and child care, or to locally relevant skills development aimed to meet market standards. The mapping of informal learning opportunity is complex and is considered in the next section of this chapter in relation to local knowledge bases and knowledgeably skilled individuals.

LEARNING COMMUNITIES AND CAPABILITY

In Wangchuk's community school and Dechen's NFE class all children live within 30 minutes walk of the school. Teachers, children and their families all live in close proximity to the school and share similar daily life experiences. In contrast, the children in Leki's lower secondary school come from many parts of the country. Some children are day students from the local area. Some children, like Leki, are legitimate boarding students from the wide rural catchment area. Other children from further districts take lodgings in the bazaar or stay with extended family members in order to be able to access secondary education, as Tashi did. Included among the parent groups of informants at Leki's school were aunts, cousins, older married sisters and grandmothers acting in loco parentis. A family member lodges close to the school to act as carer for the child while she completes school. Consequently the school population at lower secondary school represents a wide variety of cultures, customs and languages. A potential capability deprivation for Leki is that teachers are unable to have direct contact with his family and are not familiar with his home circumstances. They may not speak Leki's home language and he could become dislocated from his family, home language and cultural tradition.

Informal Learning Pathways

Within Dechen's local learning environment there are a range of valued informal learning choices described by the informants, provided through government, social organisations such as local NGOs and influence of village and religious leaders. Some learning is targeted to specific groups of learners, for example religious teachings where there is no specific entry or exclusion level either by age or by qualification. The valued learning outcome is, in this case, the intrinsic value of earning merit for future life and spiritual protection for the family, as a lay-person, monk or nun.

Other informal learning opportunities are open to learners who are motivated and who have access to the necessary practical resources, for example Wangchuk and Leki are motivated to learn the practicalities of vehicle mechanics from their experience with Tashi's power tiller since there is no mechanic working in the valley. Practical application of learning is a motivational factor linked to capability. Theoretical learning of motor mechanics without the opportunity for practical application has limited value to the individual. Informal evaluation of learning outcome is based on functionality of the learning achievement, in this case whether Wangchuk and Leki can repair the vehicle when it breaks down.

The local NGO officer described household-related training in water management and finance management training adapted to the local context. The water management project was designed to address the problem faced by women such as Dechen and her mother who have had to walk quite far to fetch water in the past. A village water supply was installed and village women were trained to manage the system including basic sanitation awareness training and the establishment of a community-managed rolling fund for basic maintenance. Finance training covered basic accountancy skills and required basic numeracy. One of the discussion group mothers has a sufficient level of numeracy skills and has undertaken the training. These skills have been also applied by Dechen's father to the process of financial planning for the village fund. The training is accessible to Tashi for the improved management of his shop if he chooses to take it up.

Dechen's grandmother described some of the changes she has observed in her lifetime. A national monetary system was first introduced in 1974 tied to Indian currency, to gradually replace the barter system which still exists for some aspects of local trade in Dechen's community. People of Dechen's grandmother' generation tend to lack confidence in using money for transactions because of their lack of numeracy skills. The learning associated with such a fundamental change in life style is the responsibility of

social policy makers. It illustrates the place of informal learning within broader contexts of social, historical and economic change and the connectivity of learning with practicalities and application to everyday life. Increasingly villagers such as Tashi can learn about basic book-keeping and ways of saving for future investment including the concept of loans and interest rates, all of which require numeracy skills. The majority of children and youth in the valley now have basic numeracy and literacy skills whereas the majority of adults do not have these skills due to lack of learning opportunity. Each context of social change involves new learning, leading to expanded capability, in this example linked to understanding the value of being numerate in a changing world. Management of finances is a skill to be learned in adapting to and coping with a gradually modernising rural economy.

School-going children described a range of health and life skills messages learned from the village health worker including teaching about cleanliness, information about nutrition and healthy eating, how to prevent diarrhoea, STD/AIDS awareness and the importance of dental checks. An out-of-school 14 year old from Dechen's village commented that children learned the health messages but their parents still did not know about good health practices. Dechen's NFE class recalled that they had learned about cleanliness, safe drinking water and safe motherhood. The health worker described a detailed list of health messages he taught the villagers including home delivery advice, health lessons at school, and monastic visits for health checks and communication of health messages. While there was evidence that individual lives had improved as an outcome of functional learning and that health messages were being put into practice, the different informant perspectives suggest that there are differences in the knowledge base between generations. Communication of health messages is demonstrated as an effective means of intergenerational transfer of knowledge from the younger generation to the older generation.

Parents commented that agriculture officers come from outside to teach them about sustainable forestry management, correct use of fertilisers, care of sick animals and potato cultivation including the system of taking a loan of seed potatoes, where the farmer borrows seed potatoes and then repays from the first or second crop. Dechen's father, the village headman, observed that there were negative impacts from external interventions, for example with the introduction of chemical fertilisers which the villagers now had to reverse. The point was made that such learning should be a two-way exchange and sharing of new technical knowledge and regulations combined with local knowledge. Learning opportunity should target the specific needs of each learner group to enable

them to improve their lives. The outcome depends on the ways in which each individual is able to effectively convert the learning into practice.

Another motivator for informal learning is individual income generation opportunities. Children in the case study community described opportunities they have to learn skills such as weaving of cloth and rugs, basket making from locally grown bamboo, wood carving using local natural and sustainable resources, basic tailoring, house construction, traditional medicine and religious ritual from other family members. Often such learning is through intergenerational transfer of skills. Capability enhancement is enabled by access to the necessary resources and equipment passed from one generation to the next. The outcomes depend on quality of the product and access to markets to be of real economic benefit to local people.

In contrast, the NFE teacher learned basic computer skills through a three month vocational training programme when she completed Class X in the capital city, before returning to her village home to teach the NFE class. Her continued functioning in computer literacy is dependent on having access to a computer and electricity, neither of which are available in her village. In this case her capability is restricted in her rural situation by the lack of access to resources and equipment directly associated with learning and which is therefore not transferable from the urban context. Both she and Tashi, who also has basic computer skills, will be able to exploit this learning experience as rural services and infrastructure are upgraded to provide local access to electricity supply and communications.

Functionality of learning also arose in the context of Dechen's knowledge of smokeless stoves. Dechen's family are aware of the health problems caused from the use of open wood fires for cooking - Dechen has learned this from her NFE class - but an alternative design of smokeless stove is not readily available or affordable to her family, without which it is not easy for Dechen to put learning into practice. Such connections between learning and functionality indicate that evaluation of learning outcomes should consider the extent to which the learner is enabled to make learning functional and the extent to which social policy can influence the functionality of learning.

Local Knowledgeably Skilled People

Within Dechen's local community there are a number of knowledgeably skilled individuals who contribute significantly and effectively to the delivery of local informal

learning opportunity. Consequently they expand the individual opportunity of local people to improve their lives.

The NFE Teacher: Wangmo, the 23 year old NFE teacher, lives with her family in the same village as Dechen. She completed Class X at school in the capital, migrating there from the village to study, staying with her older married sister. Each winter vacation she returned home and during that time she learned some of the home livelihood and income generation skills such as cheese and butter making. Wangmo returned to the village when the village headman, Dechen's father, proposed her as NFE teacher. The District Education Office provided a one week training course. The village headman, Dechen's father, persuades parents to send their older, unschooled children to the NFE class. Wangmo is a role model to Dechen and her peers, having completed basic education and returned to the village to teach the NFE classes. She has expanded her capability through completion of basic education and, in turn, has the capability to expand the learning opportunity for Dechen and others in her community. She adds value to the NFE learning situation with her local knowledge of the environment, culture and language. Additionally, with her wider experience of life in the capital city she has gained other valued learning outcomes which have enhanced her positional value in the local community, that is the status accorded due to her enhanced capability. For example, she has basic IT skills and she also teaches English which is not in the NFE curriculum.

The Village Headman: Dorji, the village headman, is the father of Dechen, Wangchuk and Tashi. He is literate in the national and monastic language, Dzongkha, having studied for three years as a student in a monastic school. With his literacy skills he acted as clerk to his father when his father was village headman and has, himself, worked as elected village headman for all but six of the past thirty years during which time he mobilised the community to construct a road, a basic health unit, a community school and an NFE class. The process of development and modernisation in Bhutan impacts on Dorji's position as village headman. Today, with the introduction of new regulations enshrined in the new constitution (Royal Government of Bhutan, 2005) and associated processes of decentralisation, he will not qualify for re-election as he does not have the necessary level of formal school qualification. This example of change and reform in social organisation positively enhances the role of educated people within rural communities and is essential where responsibility for administrative, financial and human resource planning and management is devolved to the districts and subdivisions.

The Village Health Worker commented on the changes that have been made in recent

years as villagers have learned the basic heath messages conveyed through radio, through advocacy at the religious festivals, through examples set by village leaders and through integrated action from the monastic body, the agriculture workers, the NFE class and the health workers. In the past people believed that illness was a punishment for evil deeds. Now most villagers, like Dechen, have learned about cleanliness in the home, the benefits of smokeless stoves and proper waste disposal using pit latrines and burning or burying rubbish, indicators of learning outcomes which enhance the capability and quality of life of individuals.

The Lay Monk / Indigenous Doctor provides a key traditional role in the community where traditional health practices centre on religious ritual to cleanse the sick person. For many families the monk is called first to chant prayers and to perform a puja (blessing) for a sick person before the basic health worker is consulted. The villagers are learning, through advocacy programmes, to use both traditional and modern methods together. The lay monk works through oral tradition. The only way he can pass on his knowledge and skills is through an apprentice, traditionally a boy chosen from his own family.

The Agriculture Extension Worker is a key advocate of sustainable rural development. He conveys to Dechen and others around her the importance of forest management. This is an essential aspect of learning for their community, heavily dependent on the land and forest resources for house materials, cooking and heating fuel, water and animal fodder and grazing. This again indicates ways in which informal learning enhances individual capability.

The local NGO Officer has provided low-cost community-focused training for village women, none of whom had the opportunity to attend school. Twenty four weavers have been given training as an income generation initiative. However their products unfortunately do not meet market standards. Women have also participated in NGO initiated energy and water management training programmes since some have to collect water from far places. A good water supply has been installed and women have been trained in water management, sanitation and basic maintenance of the system. The NGO provided training for local management of a sustainable community welfare fund, established as a rolling fund with small contributions from each household. Several women with basic numeracy skills were trained as representatives of the community in basic financial savings and management.

SOCIAL POLICY AND CAPABILITY

Each individual's freedom to learn, described in the individual child case studies above, provides a basis for expanding the evaluation of learning outcomes. In this section the broader social policy concerns, such as poverty, modernisation and social change, are drawn out from the individual scenarios, from which to generalise and identify initial indicators of learning outcome and capability.

Policy makers can analyse capability-related data such as provided by Dechen and her family, focussing on evidence of learning opportunity from which to identify ways in which learning can improve the lives of individuals. The capability-based perspective includes evaluation of the range of information and choice available to learners, actual levels of functionality and socio-cultural constraints to the achievement of functionality from formal and informal learning. This information complements performance-based evaluation of learning measured as achievement through certification and course completion. Capability-based evaluation also complements relevance-based evaluation extending the scope of the evaluation beyond the boundary of local context, providing policy makers with evidence of ways in which learning actually improves the lives of individuals. A baseline may be determined from which targeted social developments can take place and the particular opportunities which exist for different groups of people can be analysed within the framework of the country's social policy. Each of these aspects of evaluation contribute to an individual's freedom to learn.

Social policy towards learning and capability affects Dechen and each one of her family differently by influencing, for example, the range of learning environments accessible to each individual and the quality and relevance of each learning opportunity to the life of each learner. Social policy in this sense connects individuals and learning organisations, ultimately influencing actual outcomes and capability. Analysis of the influence of social policy describes, implicitly and explicitly, how different learning systems have contributed to improvements in their quality of life. This level of analysis moves beyond relevance-based case studies that describe individual learning opportunity within a cultural context, to include analysis of the impacts of social policy on individual opportunity. Analysis can focus on individual impacts of social policy according to gender, social and economic status, ethnicity and other variables, singling out the variables that impact most significantly for each individual.

In Bhutan, the provision of rural community school classrooms such as Wangchuk's and

NFE classes such as Dechen's reflects the education policy of Bhutan which, instrumentally, aims to provide basic education for all children and, intrinsically, aims to improve the quality of life and well-being of the population through improvements in the quality of education services (Royal Government of Bhutan Department of Planning, 2002c). In an established advocacy programme to encourage local initiatives towards the achievement of basic education for all children, the government provided teachers for community schools once constructed and donor funding was available for the purchase of roofing materials, perspex for windows and a basic supply of books and stationery. This example of community, government and international agency working together has enhanced the learning opportunity for Dechen's village community. It has encouraged community self-determination as a model of capability enhancement, where a community chooses to take up the option.

Social policy in Bhutan promotes the concept of the educated farmer, illustrated by the fact that, as the District Education Officer explained, the previous Education Minister visited almost all schools across the country conveying to students the importance and value of returning to the villages to work after completion of their education. This is a consequence of the growing problems of urban migration, including migration of families to the capital to improve their children's chances of gaining a better formal education. Dechen's father, the village head-man, reflected on the dilemma of urban migration, the importance of a basic education and the concept of the educated farmer:

> When children are young they don't realise the value of staying at home to work. They think there is not much available compared to government service … rather than forcing people to return to the village after education we have discovered that it is important for the parents to encourage children to come back but education is a must for all children whether they stay away or come back. Even if you are educated you still need agricultural products. Educated farmers can use different ideas and can increase production. Above age 12 children can go to school in the morning and do some work later – the best of both worlds. The benefits of NFE learning are a greater awareness of the value of working at home.

He acknowledged that children do not appreciate this particular value until they are much older:

> Perhaps when they reach thirty years old they will realise that it is important to

stay at home in the village but education is a must.

However, this is in contrast with the view of Wangchuk and Leki, typical of the attitude taken by children in the study, that returning to the village as educated farmers will be "a waste of our education and a disappointment".

At the institutional level, social policy influences change and development by opening up or restricting learning opportunity. Social policy has brought changes to the level of qualification needed for entry into the next level of study or employment such as has happened in the working lifetime of the agriculture extension officer. Entry into his course increased from Class X pass in 1998 to Class XII pass in 2004, with 15 students in his class and increased by 2004 to 500 students competing annually for 60 places.

In Dechen's case learning has been enhanced through social policy support for the development of NFE classes, with a curriculum designed from analysis of local perceptions of valued learning outcome. As an example of capability enhancement learners have effectively been empowered. For Leki, local circumstances resulted in over-age enrolment and the requirement to move away from home to continue formal education beyond Class VI. Some children choose to leave school at this stage though the government is not able as yet to track individual children and so it is not possible to properly interpret the aggregated figures of school dropout rates. This illustrates the variability of actual education status of children with changes in social policy over time and place, a factor which is hidden or smoothed out in the statistical data on school attendance and which indicates an aspect of imprecision in the quantitative data.

The case studies illustrate ways in which social policy affects learning opportunity by influencing the richness of learning environments which are enabled to flourish and the extent to which these are decentralised and community-driven, or centralised and controlled by the provider. Institutional factors impact not only on what individuals actually have the opportunity to achieve but also on the values they hold which influence their expectations and aspirations for achievement, as outcomes for example of each child's different learning experience.

Poverty and Development

Current development strategies in Bhutan are strongly focussed on poverty reduction. Education is acknowledged as one means to poverty alleviation (Royal Government of

Bhutan Department of Planning, 2002b). Development, as improved learning opportunity, will not impact on the material well-being of the case study children without corresponding expansion of economic and other opportunity. Indicators of poverty differ between rural and urban Bhutan with parallel differences in the ways learning can improve lives aligned to economic opportunity. Urban poverty in Bhutan generally relates to cost of living and employment opportunity. Rural poverty relates to opportunity costs of school attendance versus family labour needs and other income-generation opportunities.

In Dechen's family it is difficult to assess their real level of poverty. Tashi owns several items which are indicators of relative wealth, such as the power tiller and solar power, assets which give relative freedoms and improved quality of life. Considering the non-equivalent case of Dechen and Tashi in terms of actual learning outcome, it is doubtful whether an evaluation could quantify the changes which particular learning will make to either of their lives. Were it possible to say whether Dechen's NFE learning has a higher value in improving her future life than the value of Tashi's Class X pass, the meaningfulness and validity of such an equivalence comparison is questionable. The valuation depends in part on the exchange and use value of the learning which is determined by its valuation within the social and economic environment of the individual. The relationship between poverty indicators, learning outcome and improved quality of life is tenuous, with no validating evidence from this study of attributable impacts.

Reflecting on the changes in learning opportunity that have taken place during Dechen's lifetime in contrast to the learning opportunities of her parents, there have been significant improvements in the provision of social services with variable impact and with a measure of expansion and contraction in some aspects of capability. Dechen's father and uncle could only access several years of basic modern education by walking three days to the capital, now a five hour drive away. 25 years ago the first primary school was constructed in the valley, two hours walk from Dechen's village, still too far for young children and girls to walk daily, with the danger of wild animals, swollen rivers and flash flooding. Leki was enrolled in this school at the age of ten. Five years ago the villagers contributed their labour, mobilised by Dechen's father the village head-man, to construct a community school in their own village. Once constructed, the government provided qualified teachers and textbooks. Wangchuk was enrolled into this community school when it opened, aged nine years old. The NFE classes are held in the community school to which Dechen enrolled aged 15, when classes began two years earlier.

Freedom to Participate in Social Change

Rural decentralisation of local services offers a channel for community involvement in planning, governance and decision-making. The government and international organisations supporting the decentralisation process in Bhutan are working to develop local opportunities for learning through external assistance while also maintaining traditional values. However, this contrasts with development constraints such as Dechen's father is experiencing, where uneducated individuals no longer qualify to participate as leaders in the decentralisation and local governance process without a minimum level of basic education. Decentralisation as part of a development process reflects a social policy agenda of increased participation and improved quality of life for diverse populations. The process in Bhutan is intended to be inclusive by providing opportunities for participation in planning and decision making discussions. However the intention is not always achievable because, for individuals such as Dechen's mother and grandmother, social norms associated with lack of education inhibit their participation. This behaviour was observed by some individuals during the focus group discussion.

Dechen and her classmates indicated that their level of education leads to feelings of intimidation, inadequately "qualified" to participate in more sophisticated and complex systems of local governance. Their level of articulation in the focus group discussion indicated a general lack of self-assurance and self-determination compared to the school attender groups. They expressed the view that those who had not been to school did not know anything and that they did not know what children could do at different levels of school completion because they did not know anyone who had completed school. They did not know what else they could learn. Unschooled parents from Tashi's road-head village said they did not know what people could learn at the Natural Resources Centre in the village, they had not learned anything at the Basic Health Unit, they had not learned about the government Rural Development Fund because they had not been to school and for the same reason they did not think they could learn from the NGO training classes.

Social policy cannot change social norms and behaviours towards participation unless it is recognised as a basic capability and a strategy is developed to address this aspect of individual capability deprivation or unfreedom. An indicator would be the extent to which individuals, such as different members of Dechen's family, are encouraged and enabled to participate in democratic processes such as decentralisation, relative to or independently of their level of formal education.

Community participation and in-kind contribution to communal social welfare in Bhutan

has its origin in secular and religious traditions of self-help in contexts of physical isolation of small scattered rural communities. Community construction of the road, the community school including NFE class, and renovation of the monastery has contributed towards improvement in quality of life for the community. This is a characteristic of the extended family pattern of living combined with contexts of poverty in a subsistence economy where the need to cooperate is clearly mutually beneficial. However, this pattern of rural community self-help is gradually changing as modernisation and development takes children like Tashi and Leki away from the local learning environment into the new learning community of school for much of their formative years, changing their values towards their own communities and changing the ways in which community participation can be realised in relation to learning outcome. The social structures and characteristics of the home, village and school learning environments impact on each individual's freedom to learn.

A particularly striking example of social change to have affected Dechen's community in terms of learning outcome and capability is the impact of the international donor-funded potato project. The entire population of the valley has changed in the past 20 years from a non-cash economy of subsistence farming of yak, buckwheat and rice to cash crop potato cultivation. As Dechen's grandmother commented:

> Before there were no potatoes - only buckwheat and barley growing here. We made noodles and pancakes from buckwheat and turned barley into alcohol. Now we eat potatoes, radish and turnip and the rice comes from the border town in the potato lorry so we don't have to grow it and carry it like before, a two day walk up from our winter home.

Learning directly associated with this particular development project initiative dominated every discussion with children, parents and secondary informants. Villagers learned new skills and knowledge including: a change of cooking, diet and nutrition; by-products such as wool for weaving cloth replaced by ready-woven imported cloth; the need for some villagers to learn basic business and marketing skills including financial management, transport management and functional learning of the language spoken at market. Income from the potato cash crop is used to buy basic food and clothing with very little left for luxuries or for saving.

The impact of the potato project, considered in terms of learning outcomes and capabilities indicates a contraction of some basic capabilities such as women's weaving

skills. This learning outcome is additional to the anticipated direct learning outcomes of new skills and knowledge of potato cultivation and marketing. It has replaced an essentially self-sufficient local knowledge base with a model of livelihood dependency in which impact is directly attributable to the project but where the magnitude of change is difficult to quantify as expansion of capability and individual well-being (Alkire, 2002, p. 231)[7]. Economically, if there is a good harvest the auction price is low and vice versa, and the community is economically dependent on markets outside Bhutan. Socially, work is still labour intensive and children's school attendance remains an opportunity cost. Personally, women now have no time for weaving and have not taught their daughters to weave.

Social change associated with learning to weave crosses three generations of women in Dechen's family. Dechen's grandmother and mother both learned to weave from their mothers but neither Dechen nor any of her NFE classmates have learned to weave. The local NGO runs a training course in weaving for income generation though the women in Dechen's family did not know about this opportunity. Though they keep yak from which wool was previously spun and cloth woven, Dechen's family now buys readymade cloth using the potato income. Everyone expressed a particular view on this previously valued learning outcome.

Dechen's grandmother said:

> We don't make any savings on potatoes. We spend it all on imported cloth, oil and salt that we didn't have before.

Dechen's mother said:

> We learned weaving from mother like a tradition but now Dechen does potato work during the day and studies at NFE class in the evening. There is no time for Dechen to learn to weave.

[7] In case study evaluations of development project impacts described by Alkire, capabilities are identified as project outcomes, providing a project-focussed operationalisation of the Capability Approach. Alkire, S. (2002), *Valuing Freedoms: Sen's Capabilities Approach and Poverty Reduction*. Oxford: Oxford University Press.

Dechen said:

> Mother learned to weave from her mother. I would like to learn but I don't know where I can learn.

Dechen's father, the village headman, said:

> The women used to weave the (clothes) and blankets. Now it is much easier to get the factory cloth and thread imported from India. It is difficult and time consuming to card and spin the wool. We hope there is a machine to card and spin the wool one day. Weaving and potato growing are both time consuming.

In this case, women are losing the capability to make their own clothes from local subsistence economy resources, replaced as the outcome of an externally funded project by the similarly time-consuming labour of potato cultivation from which cash is earned and then exchanged for cloth or thread made in a neighbouring country. Changes in valued skills and associated capability such as this are inevitable over time. However, a capability-based perspective raises the question of whose values are dominant and how individual development is evaluated in the context of social policy. A capability-based approach includes evaluation of the impact of social policy and external interventions that influence social change in what is valued as learning. This is generally beyond the scope of relevance-based evaluation.

Connections

Learners do not necessarily make the same connections about learning as social policy providers and this missing connection will affect their valuation and appreciation of the benefits of learning and related expansion of capability. The health worker described mother and child health care as an important learning opportunity for village women, provided through the Basic Health Unit, addressing issues such as avoidance of multiple births and teenage pregnancy. This example of externally-driven learning is foundational to the enhancement of other basic capabilities and reflects social policy advocacy and social mobilisation towards improving the lives of individuals. Neither Dechen nor her peers or older women in the study identified with this as a learning opportunity. For Dechen, learning of mother and child health messages is directly connected to the NFE class where the topic is covered in one of the NFE books, seemingly distinct and disconnected from the messages of the health worker. This highlights the levels of

connectivity made by the learner and the learning provider between learning and everyday life. It suggests that policy makers may contribute to the lack of connectivity by compartmentalising learning and separating it from everyday life.

Dechen seems to lack understanding of the intrinsic value of learning for the ways in which it can improve her life. This may be too difficult for her to articulate or may be something she has not been asked to consider before. The implication here is that social policy may be based on generalised assumptions about the connections which all learners make, rather than analysing the variation in the connections that different groups of learners make between learning and understanding of the opportunity this provides to improve ones quality of life.

Freedom and Unfreedom

Dechen has already experienced unfreedoms as a girl child, unable to access a local primary school, which has effectively closed all future formal learning opportunities for her except for NFE classes. Wangchuk and Leki both have access to the next level up in the system at least through to completion of basic education Class X, unless they drop out. Some village children drop out of the system when they graduate to Class VII and have to transfer away from home to attend boarding school.

It is unclear from the discussion with Dechen as to the degree of informed choice she made when enrolling in the NFE class and the level of coercion from the village leaders. In addition, though the NFE learning programme has been carefully designed to be of relevance to students such as Dechen, there are some key elements of participation in the learning process that are missing. There is a lack of information sharing for example on progress through the NFE course. Dechen appears not to have been informed or to have understood the stages in the programme of learning. She indicates the importance of receiving a certificate to mark the end of the course. There is a problem of lack of sufficient books for learners to take home which, with almost no reading materials accessible to learners outside the classroom learning environment, casts doubt on the sustainability of their literacy skills. The dependency of learners on books, teachers and classroom environments for learning are strongly established and less formal learning is, by comparison, undervalued. The lack of self-determination of learners in the learning process is a consideration to be addressed by the learning provider where participation in decision-making and engagement in or understanding of the learning process is unrealised by the learner. Attention to any of these considerations could expand Dechen's capability.

The evaluation of Dechen's capability raises several assumptions about learning outcome and enhancement of freedom. In addition to providing the basic capability to be educated, Dechen's NFE studies include outcomes foundational to the enhancement of other basic capabilities. It is assumed, though difficult to demonstrate, that Dechen has gained self-esteem in addition to literacy and numeracy skills as a reasonable outcome of NFE attendance. It is assumed that in future she will be able to participate more in her children's education in a way her mother's generation of unschooled parents have felt unable to do. She has gained the potential for improved confidence and competence in motherhood and personal financial management. She can read the newspaper and complete forestry application forms for herself and for others. She may utilise that knowledge in different ways to that of other NFE learners according to each one's living situation and individual disposition. Crucially these potential freedoms need to be counterbalanced with evidence of unfreedoms. In Dechen's case this includes evidence of missed opportunity for participation in decision-making and self-determination in learning.

CONCLUSION

This chapter has shown, through rich description of the learning contexts of four children from one Bhutanese family, that the evaluation of learning outcome can be expanded to measure the impact of learning on the lives of individuals. The evaluation moves beyond the scope of quantitative performance-based measures of formal school learning and serves to refine relevance-based evaluation to focus on (i) the evaluation of learning outcome as enhanced or restricted freedoms of the individuals to improve their lives and (ii) the impact of social policy on individual freedoms in relation to learning outcome and future opportunity.

Several implications can be elicited from the profiles of Dechen, Wangchuk, Leki and Tashi. First, variation in learning outcome and opportunity, disaggregated down to the individual level, identifies significant differences in freedom to learn between four siblings. Such disaggregation is not practical for large-scale evaluation of learning outcomes. However small samples can provide generalisable indicators of variation in learning opportunity, identified over a short time period, even within one generation of children. This also suggests that time, as a variable, differs from one population to another for example where one community may be experiencing rapid change in social policy within a generation and the social policy in another population may remain unchanged for generations.

Second, variation also exists between the opportunity open to each child and the actual gain. For example, beyond simple performance-based comparison of the number of years each child attended formal or institutionalised learning, what can be stated about the added value of the learning outcome to each child's future opportunity to improve her quality of life? Social policy makers may question the extent to which any of the children in these profiles are better prepared in life skills, social skills, vocational skills, academic skills or functional literacy and numeracy than their siblings. The non-comparability of the datasets is of significance. A manipulation of data to make the cases comparable would lose the essence of the evaluation. A capability-based evaluation would focus on the added value of learning opportunities in enhancement of individual freedom; for example, whether people such as Dechen and her brothers are better able to avoid harm and have acquired learning foundational to other basic capabilities, such as financial and household security, through attendance at NFE classes, through completion of basic education or through the informal learning opportunities provided by local NGOs and knowledgeably skilled individuals. Indicators of individual freedom to learn would provide the basis for comparison across diverse and unequal situations.

In the next chapter children in Sri Lanka provide the evaluation evidence for analysis of the ways on which individual children convert learning into opportunity. Social, personal and environmental conversion factors are analysed to gain an understanding of the impact of learning on the lives of individuals. The three evaluation methodologies are contrasted to establish how each one reflects individual learning outcome.

Chapter 6. Basic Capability and Conversion of Learning to Improve Quality of Life

INTRODUCTION

Learning is acknowledged as a fundamental means through which an individual can improve her life (Sen, 1999, pp. 90-92). However not all learning leads to improvement in the life of an individual and some learning may be detrimental to the individual. Furthermore, learning that has the potential to improve life may not always be realised. Beyond established economic measures such as increase in earnings for each additional year of formal education and quantitative social measures such as improved mother and child health for each additional year of formal education (McMahon, 1999, pp. 111-124), there is no prescribed methodology for evaluation of improvement to or deterioration of quality of life as an outcome of learning and the related concept of evaluation of future opportunity inherent in a capability approach.

In this chapter qualitative data from the Sri Lanka study will be analysed to clarify the meaning of basic capability in the context of learning outcome and to identify the relationship of learning with basic capability. Evidence of ways in which learning is converted into improved quality of life or converted into future learning opportunity is described in order to identify constraints and enabling factors. Learner perspectives on performance-based, relevance-based and capability-based evaluation of learning outcome form the basis of the analysis.

Individual capability profiles of two 14 year old girls from rural Sri Lanka are described. One girl is studying in Grade 9 and the second left school before completing basic education. These profiles are supported by a composite picture of a range of learner perspectives on valued learning outcomes to describe various situations experienced by children and their families living in rural poverty in Sri Lanka.

A definition of poverty as "deprivation of basic capabilities rather than merely as lowness of incomes" (Sen, 1999, p. 87) is considered appropriate to the particular context of this study since this enables inclusion of social and environmental factors which enhance an individual's freedom to improve her life, such as levels of information access and self-determination, in addition to economic factors.

As in earlier discussion, the intention is not to formulate a comparative metric of learning outcome, basic capability or conversion factors nor is it to argue for equality of learning

opportunity since the essence of this argument is to identify individual, context-related levels of learning outcome and basic capability. The challenge is to identify methodologically valid means of mapping relationships between learning and capability enhancement or deprivation.

EVALUATION OF BASIC CAPABILITY

Drawing on key interpretations of basic capability in the capability approach literature (Alkire, 2002; Terzi, 2007), discussed in Chapter 3, three criteria need to be applied in the evaluation and analysis of learning outcome and basic capability. First, information is needed on learning that is considered essential or foundational to improving a person's quality of life from the individual's perspective – what learning is important and why is it valued in the local context? Second, a distinction must be made between those learning outcomes that apply to basic capability and those that apply to non-basic capability, that is learning outcomes that contribute directly or indirectly to poverty alleviation for the individual. The two aspects of basic capability used in this study are: (i) the basic capability to be educated and (ii) learning which is foundational to other basic capability. The basic capability to be educated implies that an individual is able to avoid harm as an outcome of learning, for example a person is less disadvantaged if she is able to access information through literacy skills. Learning that is foundational to other basic capabilities and future capability captures learning outcomes such as numeracy skills that enable a person to become financially more secure or to avoid exploitation. Third, analysis is needed of how learning can be converted towards improving the life of the individual – what social, environmental and personal opportunities enable individuals the freedoms to move out of poverty as an outcome of learning and what are the constraints that prevent this?

Converting Learning Outcomes to Improved Life

Application of the concept of conversion factors, drawn from the capability approach (Sen, 1997b), provides a means of categorising and interpreting learning outcomes for their relationship to social, personal or environmental opportunity and constraints. For the purposes of this research social factors are identified linked to social norms, local culture, roles and relationships including participation in civil society, citizenship and democracy in relation to learning; personal factors are identified linked to the attitude, skills, knowledge and disposition of the individual towards learning including mental and physical abilities, and associated attitude towards personal security, autonomy and independent living; and environmental factors are identified linked to external factors

relating to learning opportunity such as language, location, infrastructure systems, social policy and learning resources. The ambiguity and artificiality of this division into categories is to some extent unavoidable since it is recognised that some categorisation is necessary in order to organise the qualitative data for better understanding and interpretation of meaning. However, it is also recognised that each category has a relationship and consequent effect on other categories, for example personal characteristics cannot be isolated from the influences of social and environmental factors.

Individual capability profiles are introduced in the next section as a simple means to gather and summarise information pertaining to an individual's learning opportunity and basic capabilities.

INDIVIDUAL CAPABILITY PROFILE

The framing of an individual capability profile is proposed as a means of drawing together the various strands discussed in this chapter, capturing local perspectives on valued learning, conversion factors and basic capability. The profile is intended to provide fresh insights into the multidimensional factors which impact on individual levels of basic capability. The intention is to outline a structure which has the scope to include a range of anticipated and unanticipated learning outcomes of importance to the individual's context, expanding evaluation from performance-based metrics and setting boundaries to relevance-based evaluation.

Two outline profiles of 14 year old girls from rural Sri Lanka, one attending school and the other not attending school, are presented combining their own and their mothers' descriptions of learning opportunity. Pseudonyms are used for both profiles.

Anuja's Profile

My mother and father both have practical skills and knowledge in vegetable cultivation. We have a small plot of land and we grow enough food for ourselves and a little more which I take to the market to sell. I have learned all the skills of vegetable cultivation.

Mother completed Grade 3. She can read.
Father completed Grade 8. Father can read and write.
I have completed Grade 8 and now I am studying in Grade 9.

I have four younger brothers and sisters in school.

Grandfather is a traditional healer. He lives with us.
Grandfather has some palm leaf books about traditional medicine.
Mother has learned indigenous medicine from my grandfather.
I learned indigenous medicine from my grandfather. I learned mantras for snake bites.
Now my 11 year old brother is also learning mantras for stomach ache.

I learned cooking from mother.
Mother taught me how to treat the elders since I was very young; first to respect my parents.
There are different types of people in the village. My mother has taught me that I have to learn to neglect those who are not good for me.

Father helps me to learn Buddhism
If I get lower marks in mathematics my father advises me to do better.
Both parents are interested in my education
They say they will do everything they can for me to fulfil my dream.

Mother attends the school meetings and village meetings. She learns from the community meetings, for example how to help when there is a death in the family.

In the community we all learn how to cooperate and become more tolerant – even now mother says she is still learning this. She says she is learning to be a big person; learning by being with different people.

I like to play traditional games.
I attend the computer class and extra tuition classes. It is costly for my parents.
I want to become a lawyer. The courts sometimes give a wrong judgement so I want to fight for those who are given a wrong judgement.
My second choice is to be a doctor.

I will need to work hard and do well in my O levels and A levels.

Nilanthi's Profile

We live in the line on the tea estate.

My grandparents grew vegetables far away from here but there was very little income so they came to the tea estate when my mother was young. They worked as tea estate labourers. Grandfather died but grandmother still lives with us.

Mother completed Grade 5. She left school because the family could not afford the costs.
Father completed basic education Grade 11 and passed his O levels.
I passed Grade 5. I was promoted to Grade 6 but didn't attend. I left school because of family problems.
Father was on remand and mother had to work. There was no-one at home to look after my 3 younger sisters. The youngest is three years old.

There was a dispute about the electricity power line. My father was accused by the neighbours who suspected him of some wrongdoing with the contract. So father had to stop work on the tea estate. I had to stay away from school because of these problems.

Grandmother is looking after my sisters today but she is too old to look after them every day.
The mothers of other girls my age think my mother should let me go back to school as I am still too young. They say I should be in school.

Mother would like me to go back to school but she doesn't know how she will manage.

Mother is a tea estate labourer.
Mother says she has no skills or knowledge because she didn't complete school.
Mother says she has learned all her skills from other people in the community – all the things she can do in the estate, friends showed her.
Mother says it is more important to learn about morals and how to behave properly in life.

Father does vegetable cultivation and grows pot plants.
Father works as a labourer when he can get work.
Father can speak Sinhala and Tamil

Mother says we cannot earn enough income for all the family from growing vegetables.
She has to work on the tea estate – there is no other choice.

I do the house work.
I grow flowers to sell. I like to grow flowers. Father brings me the young plants.
I want my parents to help me to get the tree saplings to grow and to help me to sell the plants.

The profile for each child, built around a similar structure, describes the learner's perspective on valued learning outcome. The two profiles identify areas of commonality and of diversity in learning outcome. Each one provides a clear evaluation of basic capability and different individual conversion factors. Anuja's profile is very strongly focused on outcomes of formal school learning and associated future aspiration in contrast with Nilanthi's profile which strongly describes the home and family contexts and associated learning outcomes as broad ranging and practical life skills.

Individual Capability Profiles – Basic Capability as Avoidance of Harm

Anuja has progressed further through school than either of her parents. Her basic capability to be educated has been enhanced by the interest her parents have shown through attendance at school meetings, positive engagement in her learning achievement and determination to support her in the fulfilment of her aspirations. Beyond school learning she has also learned a range of skills and knowledge from her family including collective resourcefulness in ensuring their own food security and in the intergenerational sharing of knowledge for spiritual guidance and skills in local sustainable indigenous practices. An example in Anuja's profile of learning which is foundational to other basic capability is the practice of tolerance and cooperation within the community.

Anuja's basic capability to be educated is restricted by limitations of the education system such that her chances of achieving her high expectations in formal education are low and the alternatives are limited in her rural home area. The pressures to achieve in the high stakes examination phases place children like Anuja under great psychological strain and is an opportunity cost to the whole family. The harm or disadvantage faced by children such as Anuja and their parents is caused by social policy which sets a high-value on specialised academic learning, accords a lower status to less academic learning leading to lower quality, and gives little emphasis to informal learning of life skills, leaving many families to ultimately be reliant on their own and local community resourcefulness.

Anuja has time and financial costs of computer classes which are targeted towards

medium term benefits of future employability and which includes a risk factor of uncertainty about quality of learning outcome and opportunity for practical application. An opportunity cost to Anuja of school attendance is that, unlike Nilanthi, she has not learned specific livelihood skills and her aspirations are fixed on high hopes directly dependent on academic achievement.

In contrast, Nilanthi has not been able to progress through school as far as either of her parents because of social problems in the family. She has the personal capability to be educated but her socio-environmental situation has deprived her of the basic capability to be educated in the formal system. A particular factor in Nilanthi's case lies in her lack of social protection. Social welfare in the tea estates extends to cash transfer for children of families living below the poverty line but support services are not available for children and families who require guidance and counselling for example. Once a child is outside the school system she is no longer the responsibility of the education services even though education for all school-age children is compulsory. There is no mechanism in place to ensure that this obligation of the state is fulfilled. The family are also at risk through lack of social safety nets in the tea estate. Mother has life-long tenure of the line accommodation despite father's dismissal but the family has no land, so no alternative place to live. The one-room accommodation is very overcrowded for 4 children and 3 adults to live. Father is not in a position to be able to utilise his language skills which, in the capital city and in a higher position than labourer would be an asset as fluency in both languages is in very short supply.

Nilanthi shows some enterprise in developing her father's plant business and is learning on-the-job. This may be her strongest advantage to avoid harm and enhance her basic capability. The premature curtailment of her basic education is her strongest disadvantage. By not having achieved functional numeracy and literacy she is potentially harmed in other future capabilities such as financial management and ability to access information. Social policy could reverse this position if future opportunities were made available to enable Nilanthi to return to basic education when she is older and her sisters can care for themselves.

Nilanthi has had to take on adult responsibilities at a young age including child-care and income generation both of which, given her family situation, are basic capabilities she has had to acquire informally, with little preparation or opportunity to improve her practice. Nilanthi and her younger sisters would benefit from advice and support in early child care practices such as the village health worker can provide. She could also benefit from a

community income generation initiative for example to improve management of a small business enterprise or to gain better access to markets, building on her existing practical knowledge. As an alternative learning path this opportunity, if available, would offer a child such as Nilanthi a practical means to continue a vocation-based education with costs and benefits calculated to maximise her present situation focused on flexible and relevant informal or non-formal learning opportunity. This would directly enhance her basic capability, which a return to formal academic learning would be less likely to achieve.

Nilanthi has been exposed to learning associated with legal procedures including rights, representation, empowerment and wider consequences, though this learning was implicit in her particular family circumstances and she may not, at her age, have been personally able to convert this into learning. Such an example provides an opportunity for learning providers to reflect on the relationship between lessons on civic education in school and the application of learning to a real life situation for individuals such as Nilanthi's father. Practical learning rather than classroom learning may enable the individual to avoid harm through enhancement of basic capability, considered in this context of social justice.

Individual Capability Profiles – Conversion Factors

The profiles illustrate a range of conversion factors which each girl was able to apply to convert learning into improved quality of life. These are now discussed in order to gain a better understanding of the dynamics between converting learning outcome into the basic capability to improve ones life.

The social context in which Anuja lives, including supportive parents, a child-friendly school and a society that places high value on formal learning, encourages her to persevere with her education and to aspire to convert that learning into a good career. The social and environmental context of formal education which, beyond basic education is highly competitive and selective, means that the likelihood of Anuja converting her school learning into the career she aspires to is statistically very low.

Several factors need to be taken into account. First, the education performance of children in Anuja's district of Nuwara Eliya is low compared to the national average with rural scores averaging lower than urban scores for numeracy, literacy and life skills performance (Annex 1, Table 8). Second, social policy measures have been designed to increase the opportunity for children such as Anuja to convert her formal learning into higher education opportunity. The percentage of students accepted into the limited

university places in Sri Lanka is weighted in favour of the more disadvantaged districts including Nuwara Eliya. The minimum score for entry into specialised disciplines is lower for the disadvantaged districts than for other districts. The minimum score for entry into the faculty of medicine is 20 percent lower for Nuwara Eliya students than for Colombo students. There are fewer students competing in Nuwara Eliya than in Colombo. Nevertheless, from the latest information available, the number of students from Nuwara Eliya achieving the minimum pass mark was below the quota in 8 out of 26 university disciplines in 1997/98 (Annex 1).

The conversion of Anuja's school learning into improvement in quality of life can be analysed as (i) instrumental outcomes ie the achievement of her career aspirations or as (ii) intrinsic outcomes ie the freedom to pursue other basic capabilities. The instrumental outcomes have to take account of the sum of conversion factors weighted for and against Anuja in formal learning opportunity. This can be interpreted as the aggregation of her positive personal, environmental and social conversion factors (personal motivation, child friendly school – safe and accessible, social policy towards disadvantaged students, and parental support) which are weighted in her favour and her negative personal, environmental and social conversion factors (match between actual ability in core school subjects and aspirations, quality of teaching in the school, social policy towards academic achievement for a minority rather than focused on life skills for the majority, and lack of information).

The conversion of Anuja's learning as intrinsic outcomes is less focused. The profile suggests that life skills such as for food security, home management, and social protection are key areas of learning of importance in improving Anuja's quality of life. Indigenous knowledge and awareness of social norms and behaviour can be converted into achievement of other basic capabilities such as better family healthcare practices, protection from harm both as a girl child and in relation to social tolerance, and practice of religion or faith. Conversion of learning into improved quality of life has social policy implications, if for example an individual is not permitted to practice her faith or if society does not provide social protection for the girl child.

This example shows that conversion factors are multidimensional and include negative and positive factors for each learning outcome. Conversion factors combine individual, family, wider community and institutional dimensions of social policy, demonstrating the inter-relationships and the fact that they cannot be considered in isolation from each other.

Nilanthi has learned basic numeracy and literacy skills which are foundational to other basic capabilities. This learning will for example enable her to access information for herself and to check financial transactions in her small business enterprise. She will not be able to return to formal learning so will only be able to further upgrade her basic literacy and numeracy skills through private classes. This is a social policy constraint which is addressed in other education systems through return-to-learning programmes.

Nilanthi has been able to convert her informal learning of child care practices and interest in plant cultivation to improve her personal and family situation. The aggregation of positive and negative factors for Nilanthi draws on the following learning experiences: the positive personal, environmental and social factors include the responsibilities for child care and income generation which Nilathni had to take on; the strong family bonds reinforced by the problems and hardships the family had to face; and understanding of a legal dispute and conflict with neighbours which is an adult problem that Nilanthi was drawn into at a young age. The negative personal, environmental and social factors include the lack of legislation that would enforce Nilanthi's right to basic education and the related lack of social welfare to support Nilanthi and her family so that she could return to school; her mother's lack of education and related personal feeling of lack of self-esteem; the financial insecurity of her family.

In analysis of both Nilanthi and Anuji's profiles a similar combination of negative and positive factors relating to individual, family, wider community and institutional dimensions of social policy are identified. In Nilanthi's case all the conversion factors relate to the family problem and the ways in which this core issue has impacted on her life. For Anuja the conversion factors focus on the relationship between conversion of formal learning and achievement of aspiration as the core issue in Anuja's life at the present time. Analysis of basic capability and conversion factors will change for both girls over time, depending on the learning pathways they choose to follow, the particular core issue for them at a given moment in time, and the positive and negative impacts of family, wider community and institutional dimensions of social policy.

Capability-based profiles could provide evaluation data for analysis of capability of the individual to improve her life, as well as reflecting aspects of capability deprivation. Alternatively, profiles from a survey of a particular population could be used to map out the patterns of basic capability enhancement and deprivation inferred from analysis of local perspectives of valued formal and informal learning outcomes. Individual or community capability-based profiles could inform social policy planning through which

to identify learning needs, targeted to improve lives.

A comparison of the two case studies illustrates that while both girls had the same initial opportunity to attend school their learning pathways diverged due to differences in family circumstance after completing and passing Grade 5. A Grade 5 pass may have been used simplistically to evaluate the two girls' learning outcomes as equivalent at that stage. The individual, family and community level characteristics are what determines the extent to which each girl will differently convert her learning into capability. The case studies also illustrate that there are both negative and positive dimensions to conversion factors and each individual will have a unique, dynamic and differently realisable combination of capabilities.

At an individual level two contrasting learning opportunities and related conversion factors are identified from the case studies: (i) Anuja's opportunity to convert academic learning into a career opportunity and (ii) Nilanthi's livelihood skills learning converted into increased well-being in the form of financial security for the family. Factors which enable conversion of learning achievement into future well-being opportunity include individual competencies and disposition, access to relevant information, peer competition and market demand. Anuja had successfully progressed through school to Grade 9 with personal satisfaction generated from her own achievement compared with the learning achievement of her peers, and her own aspirations for future opportunity in higher education. Nilanthi's personal satisfaction came from her knowledge and skills in plant cultivation. There was no sense of competition such as direct comparison of achievement in her area of specialisation against that of her peers. Anuja was also uninformed about learning related to broad livelihood opportunities in the market place and had limited awareness of basic life skills such as mother and child health and household financial security. Nilanthi was aware of the skills and knowledge she needed for future livelihood learning but was reliant on informal learning opportunities from within the family and local community having opted out of mainstream education. Nilanthi was not aware of the extent to which she might be disadvantaged in future by leaving school before becoming functionally literate and numerate, and able to function independently and with individual autonomy. Anuja was not aware of the cost factors and how competitive the high stakes examinations would be for entry into university and professional qualification.

At the family level conversion factors illustrated from the case studies include parental interest in the child's education and learning achievement, opportunity for inter-

generational transfer of skills and knowledge (child to elder and elder to child), levels of formal and informal learning achievement of close family members, varying levels of social responsibility and family security. Anuja's parents were encouraging her to pursue her education despite opportunity costs to the family which they were able and willing to manage. Nilanthi's parents had encountered a period of turmoil in their lives which resulted in Nilanthi having to drop out of school. Other parents encouraged Nilanthi's parents to send her back to school, but her parents were themselves unable to find a solution to their problems. There was no legal or social welfare advice and no social safety net. Anuja's family were looking towards future opportunities which school learning achievement might bring whereas Nilanthi's parents were constrained to overcoming their immediate problems and could not, at that time, consider longer term plans. Both girls lived with their extended families which provided opportunity to exchange skills and knowledge across the generations. Nilanthi was directly able to put into practice this inter-generational learning applied to her child-care responsibilities and her small business enterprise. Anuja described inter-generational learning relating to behaviours and values such as Buddhist teachings and attitudes of tolerance whereas Nilanthi learned about a different kind of conflict resolution through being exposed to legal proceedings and potentially to issues of social justice.

At the community level, the conversion factors which emerge from the case studies include varying levels of social welfare and social protection, relevance, quality and effectiveness of formal and informal learning opportunity, community commitment to conflict resolution and tolerance, and levels of participation in community development and democratic process. The education system was appropriate for Anuja but did not address Nilanthi's learning needs once she left the formal system. There was no alternative non-formal learning opportunity made available to her. The tea estate employers did not take any social responsibility to ensure that Nilanthi could continue her education, through for example provision of child care facilities for her younger sisters. Anuja on the other hand had access to extra curricula tuition and computer classes at a cost to her family – a cost which Nilanthi's family could not consider. For both girls informal learning opportunity was provided by the family, as noted above, influenced by community groups such as the religious gatherings and village meetings. Each of these factors at individual, family and community level contribute towards capability and individual freedom to improve ones life.

In the next section the two profiles are measured in terms of learner perspectives of performance-based, relevance-based and capability-based evaluation approaches to

illustrate the fundamental differences between the approaches.

Learner Perspectives on Performance-Based Evaluation

Evaluation of Anuja's learning achievement is limited to stating that she has passed Grade 8. The school records provide information on her examination results in each subject and her position in the class for each year of her school attendance. Examination results provide norm-referencing to compare her performance in each subject against that of her peers. Criterion-referencing, which would measure Anuja's individual progress across a set of competencies, is not used as a standard form of assessment in Sri Lanka. Anuja is counted in school statistics such as annual pupil enrolment and attendance figures, the number of students who pass or fail each core subject examination in each grade, the pupil-teacher ratio and gender parity ratio.

Performance-based evaluation of Nilanthi's school achievement records her as a Grade 5 pass with examination scores by subject and her position in the class. Nilanthi is counted in the percentage of school dropouts from Grade 6 though the data does not include any reason for her absence from school. There is no tracer study to investigate what she has done since leaving school. There has been no follow-up with either Nilanthi or her parents to discuss her situation and no discussion to find out her future plans or to establish whether she has any interest in resuming her education.

Both girls are counted in district statistics and national statistics aggregated up from the school statistics. The evaluation boundaries are clearly pre-defined and serve to measure system efficiency rather than individual learning outcome.

Learner Perspectives on Relevance-Based Evaluation

Relevance-based evaluation of Nilanthi's learning outcomes would take into account the impact of her family problems on her loss of education opportunity and the social welfare implications of her situation as carer for three small children. It could focus on one of several themes particular to Nilanthi's situation such as parents as role models, vulnerabilities of families involved in court proceedings and effects of disputes with employers. It could focus on the livelihood and employment opportunities for out-of-school youth in rural areas or on the impacts of falling enrolment on the survival of a small rural school and the vulnerabilities of children travelling to the urban centre for schooling including risk of exposure to drug abuse, bullying and risk of sexual harassment for teenage girls.

For Anuja, the relevance-based evaluation might paint an entirely different picture. For example it might focus on the traditions of intergenerational transfer of local indigenous knowledge and alternative health practices, the strength of extended family bonds and its importance for subsistence villagers, or the opportunity children in remote locations now have in gaining access to new technologies.

The implication is that any of the areas of focus are relevant to the particular situation of each child but the scope of potential relevance-based evaluation is too diverse with no common thread to connect any of the possible studies. Relevance-based evaluation is focused on the social and cultural context rather than the individual.

Learner Perspectives on Capability-Based Evaluation

A capability-based evaluation provides a common thread by connecting learning outcome with improved quality of life, retaining evaluation of the diversity and richness of the two different lives and revealing the differences in the freedom each child experiences. In performance-based evaluation, each girl's learning outcome is evaluated against the criteria for achievement within the education system. In relevance-based evaluation the outcome of learning for each child is matched to a stereotype of the cultural context, in this case the expected achievement for a school-girl with supportive parents compared to a school dropout with a family background of social problems. The capability-based evaluation moves beyond both of these perspectives to focus on the child as an individual with a unique combination of learning experiences up to this point in time which constitute future opportunities as the capability to be educated and as learning which is foundational to other capabilities. Furthermore capabilities can be defined as basic to the avoidance of harm for the individual and as non-basic, beyond learning associated with poverty alleviation and subsistence survival. Basic capability for both girls includes a definition of their different personal experiences of constraints or enhancement to their opportunity to learn and how this relates to their future opportunity to rise above their present level of poverty. The basic capability definition would acknowledge inequalities in each child's situation and the consequent inequalities in outcomes rather than attempting to equalise the two situations. Ultimately Nilanthi may succeed in her passion for plant cultivation and development of a small business whereas Anuja may fail in her academic endeavours.

BASIC CAPABILITY CONTEXTUALISED

Basic capability, for children such as Anuja and Nilanthi, has a particular meaning relating to the multidimensional situations of rural poverty. The Sri Lanka Poverty Reduction Strategy Paper (Government of Sri Lanka, 2002) identifies a range of aspects of basic capability and disadvantage characteristic of rural areas including impacts of language and ethnicity for children in single language schools, disadvantage caused by poor telecommunications in rural areas leading to a digital divide, poor access to markets and to technical vocational training opportunity, increased vulnerability to effects of natural disaster where families are dependant on the land with no financial security, low labour productivity in agriculture, poor quality education and health services in comparison with less rural areas and lack of clear property rights and lack of legal protection, lack of access to safe drinking water and basic sanitation, lack of rights and social protection for women and an increase in social problems of alcoholism and indebtedness among plantation communities. Each of these cross-sectoral characteristics of poverty have implications for social policy towards learning outcome and improved quality of life for individuals in situations of rural poverty. For example social policy commitments can be targeted towards ensuring that individuals, and particularly the most vulnerable groups, can learn a range of functional skills which would enhance their ability to protect themselves and their families from harm.

In this section a wide range of learning outcomes described by Sri Lankan children and their parents are summarised to provide a snapshot of how learning can be converted into basic capabilities as opportunity for individuals to improve their quality of life. Analysis of various aspects of child-adult interaction using a capability-based approach provides alternative insights into ways in which social conversion factors improve or limit the child's freedom to live a life they value. By analysing the constraints to conversion of learning into functioning and improved quality of life, the evaluation can identify missing opportunities such as learning associated with capability to be free from exploitation, to be healthy, to be informed and to be financially secure, which further illustrates ways in which education is foundational to other capabilities and to future capabilities (Terzi, 2007, p. 35).

One way in which learning is valued is when it has direct practical application to everyday life. Children in one school enhanced their basic capabilities in vegetable cultivation by learning about innovative farming methods from several enthusiastic and self-motivated teachers. The children then taught their parents and put the ideas into practice in the vegetable gardens at home, where many of them grow food for family

survival. Similar strategies are used by the village health worker who conveys important health messages to children in school and encourages them to share these messages with their parents and extended family. Here intergenerational transfer of learning and basic capability enhancement moved from the younger to older generation. Similar opportunities can be identified by policy makers in communities where children are gaining the benefits of school learning that their parents were unable to access in the past.

Parents' experience of learning through rural development projects met with varying success.

> The agriculture adviser gave some information on vegetable cultivation. The learning wasn't very helpful - the agriculture officer comes to the area and gives instructions but there is no support. We didn't get any benefit from the Development Project. It didn't change anything for us.
>
> [father of 14 year old girl attending school, rural Sri Lanka]

> We have farming knowledge, but knowledge of how to get a full loan to do cultivation and to get a good crop would be most useful.
>
> [mother of 14 year old boy attending school, rural Sri Lanka]

These comments indicate a mismatch between the needs identified by learners and the learning outcomes delivered by an externally located learning provider. They demonstrate lost opportunity where people have few learning choices and practical, local learning solutions which could contribute to improved lives are missed. These constraints limit the practical value and potential in conversion of learning to improved basic capability in family food security. The diverse situations of family hardship and vulnerability provide examples of cross-sectoral learning impacting on children's basic capability in which informed adults, including health workers, teachers and development workers can have both positive and negative influences on the basic capability of children and their families.

Learning can only be applied and converted into improved quality of life if the learner also has access to the necessary physical resources and information. Landless people described their frustration at having skills and knowledge but lack of resources to put learning into practice, as a constraint to achievement of basic capability:

We know the cultivation skills but we don't have any land.

[14 year old girl who dropped out of school after Grade 8, rural Sri Lanka]

Informants described land ownership issues, employment, labour rights and exploitation issues as factors which impacted on, and were impacted by, learning opportunity. Contract labourers work on daily pay with tied housing, which restricts the individual freedoms of the family members.

> Children who live in the (tea estate) lines (houses) all live together with the family in one room and a separate kitchen. There is no space. Small children and older children all see how the parents behave and then they bring the problems to school. [teachers – rural Sri Lanka]

Children who lived in the line[8] described the difficulties of studying at home in the evening:

> My aunt helps in studies. I go to her if I need any help. Mother hasn't much knowledge. Aunt completed Grade 11. Aunt is a tea plucker.
>
> I keep my books in a biscuit box to keep them from the rats and I have a small table where I can work.
>
> I spread a mat on the floor to do my studies.
> We don't have electricity at home. It is hard to study at home. I don't get home until late. [14 year old girls attending school, tea plantation, rural Sri Lanka]

The basic capability to be educated and the conversion of learning to the achievement of other basic capabilities is affected by social policy such as housing or employment regulations. Analysis of learning outcome and basic capability at an individual level, identifies factors that cause variation in conversion of learning which are diverse and variable between individuals and which are diverse for each individual over time.

Some children explained the need for access to material resources to be able to achieve basic capabilities of livelihood learning through apprenticeship and learning to set up in

[8] Tenant housing on tea estates constructed as a terraced row of basic accommodation for the estate labourers.

business. A 14 year old dropout learned to mend tractors in the rural village workshop and an urban dropout needed some basic equipment to set up as a street vendor.

> I am learning how to use the tools in the village workshop. I get paid a small amount of money. I help to mend the tractor.
>
> [14 year old dropout, rural Sri Lanka]

> I want to sell coconuts at the bus stand or at people's houses. I have to buy or borrow a barrow and buy ten coconuts a day to start. I need a good knife. I know about prices for buying from the market and selling and where to go for good coconuts. Later I could sell tamarind too but first I need the things to start the business – I don't have any money. [14 year old dropout, urban Sri Lanka]

Village girls talked about learning to use a sewing machine to stitch clothes rather than pay for factory-produced ready-made garments. This intergenerational skill was passed on from grandmother to mother to daughter along with the family sewing machine, often given as a marriage present. Several parents told how the family sewing machine had broken and they could not afford to replace it.

> My sisters learned stitching from mother. Now the children are busy with studies and have no time to learn any specific skills. Their grandmother had a sewing machine. She taught my wife knitting, stitching and embroidery. Now we don't have a machine and cannot afford to buy one. My wife could teach my daughter if we had a sewing machine. [Father of Grade 9 girl, rural Sri Lanka]

The garment industry is significant in Sri Lanka ranging from home-tailoring to factory work. The study shows that the garment factory is a favoured option for girls who drop out or fail to achieve in academic learning. Some older sisters and mothers lived away from home for the economic opportunity of work in a garment factory. Once a year factory girls returned to the village with the latest fashions and presents for everyone. Girls who are attracted by the economic opportunity of work in the garment factory have to balance this with vulnerabilities such as exploitation from poor employment conditions. Social policy can safeguard individual vulnerabilities through for example, providing learning opportunity so that garment factory workers are informed and aware of their rights. Technical vocational and life skills learning may be more relevant to garment factory girls than academic learning.

In each of these examples, learning opportunities in the home and in the community were combined with availability of resources for practical application and conversion of learning into improved quality of life. In each case learning was foundational to the achievement of other basic capabilities centred on the opportunity to develop livelihood skills and income opportunities but the lack of resources limited conversion.

A distinction can be made between work undertaken by children in the home such as daily chores and work undertaken by children that contributes directly to the family livelihood. These forms of child labour are distinct from exploitative, under-aged employment in industry. They are generally less exploitative, providing productive learning opportunities within a social and economic unit (Rogoff, 2003, p. 139). Both forms of home labour are characteristic of pre-industrialised society and characteristic of many communities in rural Sri Lanka today. Such learning can be an important contribution to improvement in quality of life.

All children described their contribution to the daily workload of the home with specific tasks and responsibilities to be undertaken on a regular, routine basis. All children in the rural samples and the out-of-school samples learned relevant skills from a young age as a basic family need to assist with work at home. The skills and knowledge were directly relevant to the child's age, ability and family need. Between 10 and 14 years old children learned the basic tasks of the vegetable garden – digging with a mamothy, planting, weeding and watering. By age 12 some children were starting to learn how to use the sewing machine and vehicle mechanics. Boys aged from 14 to 18 years old were learning various carpentry and masonry skills from their fathers and uncles. By age 16 children were given full responsibility for selling produce in the market. 18 year old boys were keen to learn to drive to improve access to vegetable markets.

Non-school-going Sri Lankan children (urban and rural) gave accounts of how they regularly engaged in livelihood activities, learning the necessary skills and knowledge to contribute to basic family needs and generally taking on more adult responsibilities than their school-going peers.

> Now I am doing cultivation on my fathers land. Father sometimes goes outside the village for work. Otherwise we work in the same garden. I will learn to drive. I have two elder brothers – I am the youngest. My two brothers are also in cultivation. We farm separately. I plan to buy some land. They also want to buy some land. I don't expect any help from my parents. I will do it all myself. I have

got some savings. I don't need support from anyone.

[16 yr old school dropout boy – rural Sri Lanka sample]

We have a poultry farm. It's interesting to work there but I don't get any income from it. We have 7 chicks. We keep the eggs for hatching and give some chicks to friends to rear. There is enough room in the garden for the chicks to run around. Uncle is selling grass for turfing and fertiliser. I have learned from my uncle. I have learned about fertilizers from him and I know how to do turfing.

[17 yr old school dropout boy – urban Sri Lanka sample]

These boys are learning practical skills and knowledge that are foundational to achievement of other basic capabilities, primarily that of income generation in a location where there are limited opportunities to gain financial security other than through individual enterprise and opportunism. Children in such situations of poverty and limited employment opportunity often take on the livelihood opportunities of the extended family.

The rural Sri Lanka school dropout children indicated that their parents are a key source of support when they take on adult responsibilities and start work. They assist with trade tools, resources and informal skills development including livelihood skills, homemaking skills, skills for independent living and business development skills.

I need some materials and equipment eg. planks for carpentry and I need my parents to help me to get this. One uncle is doing carpentry so I know the tools and what is needed. I know how to measure the timber and I learned how to use the plane. I learn by watching my father and uncle and they show me what to do. Father learned from grandfather. Father borrows a manual long-blade pit saw to saw planks and will teach me. [14 yr old school boy, rural Sri Lanka]

Mother helped me to submit the application for the dressmaking class using ordinary machines not factory machines. I don't have a machine at home but I can use the machine at the class. I think I will be able to earn from this work.

[14 yr old school dropout girl, rural Sri Lanka]

Father has enough equipment so I can use his equipment for the masonry work. There is plenty of this work. I want help to buy my own set of equipment.

[16 yr old school dropout boy, rural Sri Lanka]

These are serious undertakings by children who are aware of the need to convert their learning and skills into opportunities to improve their lives as essential to family survival. In contrast, the 14 year old school-going children in the Sri Lanka urban sample differed from all other sample groups in that they had few work responsibilities in the home and they had very little awareness of or involvement in their parents or other adults' livelihood activities.

> Mother works near the eye hospital. I'm not sure what she does
>
> Father works in town. I'm not sure what he does; repairs TVs and cookers I think
>
> Father is a market trader. I don't know what he does.
>
> [boys attending school, urban Sri Lanka]

For these children and their families, achievement in the competitive academic world of school was the primary focus and, until the opportunity was lost at one of the examination hurdles, this was their main hope for future improvement in their quality of life.

The above examples present a variety of ways in which adults interact with children contributing directly and indirectly to their informal learning in preparation for securing a livelihood. Cultures vary in the extent to which children interact with adults and the ways in which this participation in or segregation from mature community activities affects children's learning opportunity and learning outcome (Rogoff, 2003). Each of these diverse situations of family hardship and vulnerability, impacting on children's learning and basic capability, raises issues of different value perspectives and responsibilities of parents towards their child's learning and future opportunity. For many in Sri Lanka the hope lies in academic achievement. In contrast, parents of school dropout children focused on support for enhancement of basic capabilities in life skills and vocational learning.

The majority of children and parents in the study have no certification as evidence of learning outcome. In general, certification provides evidence only of formal learning achievement, widely used and valued as a mechanism for conversion of learning into selection or de-selection to the next level of learning or entry into paid employment. Certification of formal learning outcomes has a high instrumental value to those who succeed within the system. Many less tangible valued learning outcomes and basic capabilities, such as learning of life skills for empowerment and self-esteem, are uncertified but may be accredited in other ways by measuring their impact on expansion

and restriction of individual freedoms or choices.

In rural Sri Lanka, learning which enhances practical capabilities is seldom linked to formal school qualifications but is dependent on informal evaluation of practical local knowledge, skills and behaviours by other members of the family and close community. Informal learning is personally, socially and economically accredited through statements and supporting, observable evidence of livelihoods and life skills and knowledge, through which one can demonstrate the basic capability to avoid harm and disadvantage. Children who had dropped out of school before completing 11 years of basic education and certification nevertheless had clear ideas about what they could achieve in the short term and the entry level skills and knowledge required.

> To enter the garment factory first they check whether I can do some maths problems and then I have to show that I can learn to cut the threads. I have some friends doing this. Mother does stitching at home and she taught me to cut cloth.
>
> [14 year old drop out girl, rural Sri Lanka]

> My brother has learned to operate the big saw at the saw mill. When I am old enough I want to enter Technical College and learn carpentry. My uncle has the tools. I have watched him working. I know where to buy the wood. I passed Grade 8 at school but I left because my family couldn't afford for me to transfer to the town school.
>
> [14 year old drop out boy, rural Sri Lanka]

The value of certification is high for children still attending school whereas, for children who have dropped out of school, conversion of learning to other more practical ends holds a higher and more immediate value. In the capability-based evaluation of learning and conversion of learning as a basic capability two conclusions can be drawn. One is that certification of learning is a representation of learning achievement which, in itself, provides little evidence of ability to convert learning into future opportunity. A high value is placed on certification of learning across Sri Lankan society generally and particularly for school attenders. A second conclusion is that non-certified learning is valued by children who do not have the opportunity to achieve a level of school certification and is evaluated using criteria associated with practical application of learning and therefore of direct conversion of learning into achievement of basic capability.

CONCLUSION: LEARNING AND BASIC CAPABILITY

These examples begin to describe individual constraints and opportunities for converting learning into basic capability. Within the capability-based evaluation framework children and their parents identified factors, some which were individual and circumstantial, varying over time, and others which were more generalised, associated with lack of resources and constraints of social policy. Individual perspectives illustrate the diversity of factors that affect a person's freedom to improve her life. Social policy is described through the practices of local providers of learning opportunity and social welfare including extended family members, NGO's, project partners and local knowledgeably skilled people. Social policy towards both formal and informal learning is shown as a condition affecting learning outcome and basic capability.

The analysis of basic capability and conversion of learning to improved quality of life develops the methodology for operationalising a capability-based evaluation approach. Performance-based evaluation uses a methodological assumption that learning achievement in specified domains of formal learning is a sufficient indicator of learning outcome without seeking evidence of ways in which learning improves lives. Relevance-based approaches focus on an opposing methodological assumption that evaluation of learning identified as relevant within a particular cultural context is sufficient to draw conclusions about how learning improves lives. A capability-based approach to evaluation complements and expands these two perspectives by basing its assumption on how learning impacts on the individual from which the relationships between learning and capability enhancement or deprivation can be mapped. The methodology gains validity through consistency in matching thick descriptive data from informants onto a structure which enables the organisation and interpretation of abstract or subjective data.

The analysis illustrated a range of social, environmental and personal conversion factors relating to the basic capability to be educated and conversion of learning foundational to the achievement of other basic capabilities that contribute to poverty alleviation. Conversion factors which emerged as variables that gave advantage to some children and disadvantage to others included parents involvement in children's learning, impacts of externally designed learning opportunity, the significance of access to resources and information in facilitating practical application of learning, variation in children's responsibilities and interactions with adults, constraints of particular living conditions on learning, and accreditation of formal and informal learning achievements. Individual capability profiling methodology enabled analyse of broad learning outcomes from individual learner perspectives. The approach is inclusive of individual, local and national

influences with implications for social policy which is responsive to evaluation of basic capability.

In the following chapter the capability-based evaluation methodology is developed by analysing data in relation to instrumental, intrinsic and positional value of learning from the local and individual perspective. The impact of social policy on learning outcomes is studied in relation to learner aspirations and choice, with the implication that social policy influences individual valuation of learning outcome.

Chapter 7. Defining Values, Preference and Choice

INTRODUCTION

Within the learner profiles described in Chapters 5 and 6 are embedded individual values, preferences and choices. These values, preferences and choices are influenced by complex processes. Analysis of individual perceptions of the value of learning can be used to expand our understanding of these processes and the inter-relationship between basic capability and improved quality of life. Learning preference and choice is based on individual values, influenced by social context. Within the analysis framework, individual freedom to learn, as an end in itself and as foundational to achieving other basic capabilities, has to be evaluated in relation to the influences of social policy.

In this chapter the instrumental, intrinsic and positional values of a range of learning outcomes are used to categorise and rationalise information on future aspirations of children and their parents set alongside information, from their perspectives, on opportunities available to them. Preference and choice are considered as elements of capability used to evaluate the extent to which aspirations are realistic and therefore potentially realisable. The argument is based on the following assumptions: a child aspires to achieve her ambitions because of their instrumental value, and/or because of their intrinsic value, and/or because of their positional value. Her value judgement is determined by a set of personal preferences – adaptive preferences of what she thinks she can achieve, revealed preferences of what she seems interested to achieve and actual preferences of what she would really like to achieve. Her range of valued choice is likely to expand in relation to her learning achievements, and her future opportunities will likewise expand. Conversely, where learning opportunities are restricted the range of valued choice will be limited impacting directly on future opportunity as capability deprivation.

INSTRUMENTAL, INTRINSIC AND POSITIONAL VALUE

The inter-relationships between the intersecting fields of instrumental, intrinsic and positional values of learning (Unterhalter and Brighouse, 2007, pp. 101-103) can be used to describe individual perceptions of valued learning outcome. For example, the basic capability to learn to manage a small business has instrumental value "people will not cheat me", intrinsic value "I want to have my own business and be successful", and positional value "people will want to come to buy their king coconuts from my shop" [Urban out-of-school boy, Sri Lanka].

Instrumental value of learning is indicated by external reward, for example where better qualifications lead to better job opportunities. Intrinsic value is indicated by the individual benefit gained through learning such as a feeling of empowerment when a person realises and exercises their right to participate in local decision-making. Positional value of learning relates to the person's self-identity and the position accorded her by society relative to others.

Each of these values can also have negative outcomes. Negative instrumental value of learning outcomes are situations in which the learner is materially worse off as a consequence of learning, for example having become de-skilled from home livelihoods opportunities or unemployed because achieved learning does not match labour market needs. An example of negative intrinsic value of learning outcomes is captured in statements from the study in which parents and children express the feeling that they do not know anything because they have not been to school or have not completed school. Negative positional valuation from learning outcomes is closely allied to the intrinsic valuation example above, strongly underpinned by adaptive preferences in which, for example, a parent states that she does not know what her children learn at school and she cannot help them with their school learning because she herself has not been to school. Parents in such situations position themselves as inferior to other parents and to their children, reinforced by dominant norms of performance-based evaluation and school success or failure.

Valuation of learning in this broader capability context is not a standardised, quantifiable unit with a simple equivalence between individuals but is determined by the value given by the individual. It does not have an implicit or absolute value in its own right, but only in relation to the value perception of each individual. For example learning to drive had no value to the informant group in rural Bhutan until the road was constructed and the potato project introduced the need to transport the cash crop to market two days drive away. Learning to survive in the forest on the two day walk to the nearest small market town had a high value before the road construction for rural children and parents in the Bhutan study. Knowledge of sustainable local forest management has an increasingly high instrumental and intrinsic value to the same people and a potentially conflicting value to those held by outside business interests where road construction opens opportunity for de-forestation on a large scale.

The capability-based evaluation framework needs to provide the flexibility to capture changes in instrumental, intrinsic and positional value over time relating to future

opportunity and evolving social contexts, including constraints to achievement of aspirations. The performance-based evaluation framework cannot accommodate non-standardised individual valuations, the parameters of which might change over time according to changing individual and societal valuation of learning. Relevance-based evaluation may focus on individual valuation, for example reasons for school dropout, without investigating the implications for future opportunity. A capability-based evaluation framework can provide indicators of individual valuation which show the perceived instrumental, intrinsic or positional value of learning to improved quality of life: "how I think learning can benefit me" and the corresponding issue of "how social policy influences my learning outcomes".

INDIVIDUAL CAPABILITY TO ACHIEVE ASPIRATIONS

Capability, in the context of valued learning, relates to the freedoms and opportunities an individual has to achieve her aspirations. Aspiration implicitly suggests each individual's hope for improvement in her quality of life. Analysis of the extent to which the aspirations are realistic and achievable will provide indications of valued learning outcome where actual learning outcome is not an end but a means to future opportunity. Identifiable constraints to achievement of aspirations such as lack of information, lack of financial and other resources, and lack of protection against various forms of exploitation can be included in the evaluation framework, as can opportunities which are open to individuals but are not chosen, and influential aspects of social policy such as language of instruction and reflection of diversity in the curriculum.

Sen describes four ways in which the values that influence us may emerge. Our individual values may come from reflection and analysis, from our willingness to follow convention, from public discussion or from evolutionary selection (Sen, 1999, pp. 273-274). Each of these influences are context dependant to the extent that individual freedom to aspire to one goal or another will vary according to time and place and will be constrained by each individual's life context. For example the change which results from an expansion of education opportunity for girls may be demonstrated through increased participation in decision-making processes within the family and wider community which influences the value perspective of the individual. Opportunity for increased exposure to public debate empowers the individual and expands world view, with a consequent impact on individual preferences and range of valued choice. The evaluation framework should be designed to capture and describe such changes in learning-related values, preferences, choices and opportunities open to individuals over time.

Analysis of children's future hopes and aspirations is to an extent predictable, naturally embodying the individual's expectations for improvements to her present situation. Studies of aspirations typically reveal high expectations in children for white collar jobs, higher education opportunities and a financially more secure future, with formal school education viewed as a specific means of escaping poverty (Little, 1999, pp. 162-166). In addition, the effects of modernisation in developing countries have been studied, reflecting changes in the aspirations of youth towards a more competitive career orientation, closely associated with success in formal education and of associated changes in social and cultural values (Ueda, 2003, pp. 148-161). Observations can also be made on the degree to which these aspirations are realistic and achievable. Youth studies in Sri Lanka reveal mismatch between aspirations and availability of employment opportunity (Hettige and Mayer, 2002, p. 76), mismatch between basic competencies in literacy and numeracy and employer needs (Hettige and Mayer, 2002, p. 102), and, at an aggregated level of quantitative analysis, discrepancy between student level of education and employment aspirations (Hettige and Mayer, 2002, p. 105).

The relationship between an individual's aspiration and how that sits within her actual learning experience, her life situation and her world view of future opportunities needs to be investigated to supplement the information available from performance-based and relevance-based evaluation. In performance-based evaluation, only pre-defined measurable elements of her actual learning experience are evaluated, within generalised descriptors of her life situation. No account is taken of her aspirations. In relevance-based evaluation, the individual's life situation is framed by the localised social context with actual learning outcome and aspiration similarly framed in relation to the local context. Evaluation of each social context is free-ranging across diverse topics relating to learning outcome and future opportunity. Capability-based evaluation compares the empirical data on individual aspiration and actual learning experience with freedoms the individual has to achieve her aspirations. The instrumental, intrinsic or positional values of learning embedded in children's aspirations reveal socio-cultural and economic factors in their lives. These are influenced by social policy that affects individual realisation of aspirations.

Instrumental Value of Learning, Aspirations and Capability

The instrumental value of learning can be aligned with the individual's achieved level of functionality in particular learning outcomes. Whereas functional literacy and numeracy are measurable through performance-based metrics of formal education, evaluation of

functioning in other non-formal learning outcomes is more subjective and contextualised. The individual's ability to achieve a level of functionality in livelihood skills, to function socially, to adapt to change and development or to preserve tradition, to be able to live independently and able to have their voice heard within their society each have instrumental value to the learner which determines her degree of freedom or capability.

Children in the Sri Lanka and Bhutan studies identified aspirations of instrumental value including "being able to manage financially" and "being self-sufficient and able to build a house for the family". Children were learning practical skills in preparation for the increasing levels of responsibility and independence they would assume as they mature. Levels of responsibility taken on by children varied between populations, reflecting different cultural value perspectives. The study indicated a difference between parents, whose world view may be considered "immature" through lack of exposure and lack of formal education, and their seemingly more "mature" children. Maturity here is associated with world view broadened through greater exposure to learning opportunity beyond the boundary of the individual's local environment. In contrast, another perspective would consider children to be immature in respect of preferences and choices (Gasper, 2002; Saito, 2003). The increased exposure and maturity correlation could be applied to adults in the study who had travelled outside the local environment for business, to children who left the home village to attend school and to children who had dropped out of school and had assumed adult responsibilities beyond that of their school-going peers.

Several examples from the study illustrate the instrumental value of learning, aspiration and capability in the context of parenting skills and the influence of social policy. In Nilathni's case (Sri Lanka individual capability profile – Chapter 6), she had been withdrawn from school to care for younger siblings because her parents were entangled in legal proceedings and the family were faced with severe financial difficulties. The parents appeared to have had no legal support or advice and the child was withdrawn from school. Once the child was no longer attending school it was stated that she was no longer the responsibility of the local education authority and there was no requirement for the school to follow up the case. The instrumental value of learning in such an extreme case includes the basic capability to be informed of rights and access to social protection for the whole family. It points to issues of capability deprivation including Nilanthi losing the basic capability to be educated at school, almost inevitably perpetuating the cycle of poverty in which the family is trapped.

In another case a disabled child was being cared for at home because he had not been able to achieve within the learning domains of literacy and numeracy in the formal school system – after six years of school attendance in a special class of four children he was unable to write his name or recognise numbers. In this case the non-literate parents were desperate to find some way to open up opportunities for their son, to expand his capabilities particularly in the achievement of independent living skills but the specialist school did not have a place for him and the parents had been given no professional advice about how best to care for the boy and support his individual learning needs. This example illustrates capability deprivation where neither the child nor the parents can address his learning needs. The village school attempted to accommodate the boy in a system based on academic achievement where he was inevitably going to "fail". The instrumental value of learning opportunity would, for this child, be the development of relevant skills for independent living. The influence of social policy on learning outcomes for such vulnerable individuals leads to exclusion or failure to achieve potential at a level of basic capability.

The Sri Lanka study reflected a cultural aspiration of role reversal where children hoped for support from their parents to get started in life, to learn about how to establish a small local business for example, and the parents look forward to a time in the future when their children are fully functioning and the parents can become the dependents. One interpretation of the parents aspirations for their children's academic achievement could be the instrumental value of learning to improved quality of life for their children and consequently also for themselves. In both study populations independent living included the prospect, for some children, of moving away from the family home. Preference and choice in this case is difficult to determine since revealed preference indicates that this is what has to be done in the case where choice of paid employment is so limited. Actual preference is clearly indicated when individuals declare that for example they would not want to come back to the village because "life is hard and work is poorly paid" [Sri Lanka and Bhutan rural responses]. Ultimately the choice may be limited. Instrumental values of learning and capability change over a life-time, depending on choice and opportunity.

Intrinsic Value of Learning, Aspirations and Capability

"He will have the advantage of being able to read and write. If he can get a small job, a clerk's job would do – with this I would be satisfied" [mother of a boy attending school, rural Bhutan]

Aspirations of intrinsic value are centred on personal improvement including the intrinsic value of freedom of choice and participation in future opportunities, and the satisfaction of achieving a personal goal. The intrinsic value of learning includes the attitudinal outcomes of learning, the evaluation of which is acknowledged as being complex and therefore difficult to measure. For example informants aspired to "a better life; less hard work; more advantage in business dealings; able to enjoy life" in relation to improved lives through learning outcome which enhanced individual capability, all of which are too imprecise and value-laden to be easily measurable (Nussbaum and Sen, 1993, p. 233). The arguments associated with evaluation of learning categorised as of intrinsic value is similar to the problems associated with measurement of satisfaction and desire (Scanlon, 1993, pp. 191-193).

The intrinsic value of learning corresponds with capability enhancement through individual empowerment gained from learning. The advantage of being able to read and write is understood to be more than its instrumental value and includes an expansion in the individual's ability to appreciate literature, to freely research and retrieve information, to be able to express ones thoughts and feelings in writing and to be able to make informed choices.

Positive outcomes of intrinsic value elicited from the study data include: enjoying playing sports, able to play music or paint, self-sufficient and independent of others, feeling of satisfaction and positive about achievements, able to be realistic about ones situation in life (not to be confused with adaptive preference), willing to make sacrifices, to take trouble and to make an extra effort, seeking an enjoyable and interesting job. Negative learning outcomes related to intrinsic value include: feelings of disappointment, that it is a waste of time to learn and then only become a farmer (in the view of many informants), not interested to learn certain skills and knowledge, feeling of being unable to learn a particular skill though they would like to due to perceived lack of ability and actual lack of confidence, and the declaration that something is impossible to learn.

The above sketch map of comments, selected to indicate intrinsic value, draws on vocabulary that describes attitudes and feelings rather than descriptions of instrumental valuation which draws on the vocabulary of commodities, goods and services. Closed questions that simply ask "what do you want to do in future?" will generally produce closed answers suggesting only instrumental value to learning, such as "I want to be a teacher. I don't know what I have to do apart from doing my studies well." [rural children, Sri Lanka]. Open questioning and focus group discussion on the topic of "What

opportunities did children have in the past and what will children need to know in future?", invites villagers to talk. This draws out comments describing intrinsic values: "He will be self-sufficient and can avoid being cheated in business"; "I would be happy if my daughter comes home as we have lots of work and she knows the mountains"; "Even the girls who go through NFE will be slightly better and will benefit the community." [non-literate parents, rural Bhutan]. Qualitative statements are variable in meaning and in focus, and, gathered through informal focus group discussion, are not verifiable. However, used for the purpose of indicative mapping of issues rather than taken individually and literally, they provide a picture of attitudes towards learning, aspirations and basic capability and are directly representative of the study population.

Positional Value of Learning, Aspirations and Capability

Aspirations of positional value relate to perceived values attached to particular identities and reciprocity between positions of status. For example a mother who did not have the opportunity to attend school may perceive her school-going child to be cleverer than she is; her child may consider her mother to be skilled at yak herding and knowledgeable about survival in the mountains, but she accords a low status to this compared to her friend's mother who works in a government office and drives a car. Positional valuation leads to comparison between individuals, a characteristic of performance-based, norm-referenced evaluation. Positional valuation also reflects values of social policy and social norms, even for those who wish to position themselves as somehow different to others – position is established in relation to and by comparison with others.

In the context of formal school learning, positional valuation includes "invisible forms of discrimination by gender, race or class, forms of misrecognition that occur" where schools have different and unequal effects on learner outcomes (Unterhalter and Brighouse, 2007, p. 103). Some urban schools in Sri Lanka are characterised locally as more prestigious whereas at another extreme, rural schools and estate schools have generally in the past held a very low position in the overall ranking. In the context of informal learning, positional value may reflect judgements of quality "she is the best weaver in the village", or it may reflect cultural norms "Men weave the hats and women weave the blankets" [yak herders, rural Bhutan], "In this village the men are tailors; in the next village the women stitch clothes if they have a sewing machine" [vegetable cultivators, rural Sri Lanka].

Positional value reflects influences of social policy. Three distinct categories of learning can be identified in Bhutan, each of which holds its own positional value influenced by social policy: (i) traditional learning of Buddhist practices continues to play an important part in daily life and monks hold a particular valued position in society; (ii) the positional value of formal school learning has changed from widespread resistance and low value when it was introduced in the 1960s to the position today where educated people such as the NFE teacher are accorded high status and respect in rural communities; (iii) village elders and other knowledgeably skilled individuals hold positional value through informal learning gained from years of experience. Evaluation of the ways in which social policy influences the positional value of learning can be used by policy makers to understand the dynamics of learning which is valued within a community. Relevance-based evaluation would identify similar categorizations of positional value in analysis of transmission of indigenous knowledge and skills (Rival, 1996).

Adult literacy is a key indicator used in performance-based evaluation, which establishes a clear positional value categorising individuals as literate or non-literate according to school learning. Intermediate positions of semi-literate, neo-literate, re-illiterate, post-literate and alternative literacies such as oral literacy and indigenous literacy hold less value in performance-based approaches. The example of literacy illustrates that positional value is neither universal nor easily quantifiable. However, each individual is able to make her own judgement about her position in relation to others, which a capability-based evaluation may elicit.

A distinction can be made between learning achievement, based on the evaluation of individual ability, and external factors which affect learning achievement. For example a child who aspires to be a doctor may not achieve the aspiration because she cannot achieve sufficiently high grades in examinations, either through her own ability or because of constraints in what the examination seeks to assess compounded by a mismatch between this and the quality of what is taught. In this case her aspiration was unrealistic since it did not match with either her innate ability or the constraints imposed by her learning environment. However, if she has the potential ability to achieve this aspiration but is unable to then this negative positional value leads to her capability deprivation. The opportunity may not be open to her because of culturally influenced self-perception of negative positional value and adaptive preference, as captured in the comment "somebody like me can't become a xxx!". Similarly, gendered cultural or economic perspectives on the importance of girls education coupled with the need for an extra pair of hands in the home to care for younger siblings, aging parents or for marriage

is a capability deprivation, where children are under pressure to leave school before completing basic education. The positional value of education is then influenced by social policy, and is influenced differently for each individual.

The focus group discussion methodology used in this study enabled such diverse issues to be mapped in relation to individual perceptions of the positional value of learning. The mapping of discussion points provides a framework of generalised issues relating to the positional value of learning such as level of literacy, knowledgeable skilled local people, and cultural inequalities of gender, ethnicity or geographical location which can be further investigated.

In the next section the aspirations of individuals are analysed to describe the variation in aspirations between different learner groups. In this study the purpose is not to measure equivalence in importance or realisability of aspirations between individuals.

Perspectives on Evaluating Aspirations of Rural Children and their Parents

Aspirations described by children and parents in this study have been coded, falling naturally into several groupings: (i) aspirations relating to formal learning - completion of school learning, continuing vocational training and higher education; (ii) aspirations relating to actual employment - entering the professions for some children, self-employment and local traditional employment for others, lofty ambitions of "big" jobs or fame through sports and entertainment for some, jobs with the army or police, or "anything through which to earn a living" including "going abroad to find work" for others; (iii) generalised aspirations to improve their life and that of their family - being of service to others or being independent of others, "build a house, be self-sufficient, stand on my own feet and look after the family" [children attending school, rural Bhutan]. The aspirations identified by individuals represent various combinations of instrumental, intrinsic and positional value.

While there were areas of commonality, for example in the proportion of children and parents aspiring to enter the main professions, several clear differences emerged between the two study populations. In the Bhutan study some non-school going children stated that they did not know what they could do or might like to do, including comments such as "I didn't go to school so I cant think of anything I could do" and "I didnt learn to read and write so I cant learn to do anything else in future" [school age non-attenders, rural Bhutan]. In the Sri Lanka study two categories emerged which did not feature in the

Bhutan responses: (i) for school-going children the aspiration for further studies and the hope of going to university or to technical college with a clear idea of what future learning might reap in terms of instrumental value; (ii) for non-attending rural girls the aspiration to work in the garment factory. For children in Bhutan awareness of such future opportunities for further studies or factory employment was outside their worldview of opportunity and was not expressed as an aspiration. This finding indicates the significance of local perspectives reflecting positional values and variation in the informational base from which values, preference and choice are derived.

There are three groups of school-age children in the study, distinctly identifiable as different learners – those who are attending school, those who attend non-formal classes (in the Bhutan sample only) and those who do not attend school. In the Sri Lanka sample only, the school-attending group includes those who attend extra tuition classes. For each group there are a range of aspirations which are defined by their world view of what is possible and information available to them, and their adapted preference of what they believe is achievable. These variables alone identify non-equivalence between different groups.

Children in both study locations illuminated a distinction between aspirations of school attenders and non-attenders. Whereas school attending girls tended to aspire to take up professional employment and school attending boys tended to aspire to professional employment or the armed services, non-attending rural and urban boys and girls had clear, diverse and individualised aspirations about small scale business and income-generation opportunities they were interested to pursue or had begun to pursue. They had more detailed and realistic knowledge about the way to proceed with these opportunities than did their school-going peers who often had only the vaguest information about how to gain entry into the teaching profession for example. All the aspirations expressed under the category of further vocational skills training were from early school leavers who could identify clear learning pathways they would be interested to pursue with a combination of instrumental value - "learning how to stitch garments to sell in the local market" [rural non-attending girl, Sri Lanka], intrinsic value - "I could become a better mechanic with some proper training" [urban non-attending boy, Sri Lanka] and positional value - "I have seen others going to classes wearing a uniform but don't know how to access the training" [urban non-attending boy, Sri Lanka].

A notable difference between the Sri Lanka and Bhutan studies was that while both populations of school-going children generally aspired to achieve some level of

professional qualification leading to employment, hopefully in government service, school-attenders in Bhutan acknowledged that their more realistic, albeit alternative, aspiration is to return to the village to pursue traditional local livelihoods. The negative instrumental, positional and intrinsic value captured in the comments "After we have studied it is a waste to only be a farmer. It is tiring work and we would be disappointed if we have to come back" [rural children attending school, Bhutan] is counterbalanced with the fact that "she will get her share of the farm so she can do farming. They can make money from selling the vegetables. This is the reality." [parents of children attending school, rural Bhutan].

For the remote rural population in the Bhutan study, formal schooling had only been locally accessible in the past 5-6 years. Few children had completed school. Parents and children from these communities clearly had little information of choices available to them beyond their local sphere of experience. Their aspirations, including those of students in the non-formal classes, were focused on the hope that the children would "complete their studies and get a big job" [NFE learner, rural Bhutan]. In reality the jobs available to children with no school certification were limited to low paid unskilled and manual labour such as caretaker, driver, mechanic, cook or waiter, which were not available in the rural locations but only accessible through urban migration. Apart from NFE classes, options for continuing education as adult learners were generally only available in Sri Lanka and Bhutan to high performers with a school completion certificate, where financial constraints limit access to private sector learning opportunity. In Bhutan a program for re-entry into formal education of adults who did not complete Class X and Class XII was piloted in 2006 for 148 adult learners, accessible only in the capital city (Royal Government of Bhutan, 2006, p. 38). The range of choice is determined by a variety of factors, about which some children and parents are completely uninformed.

This evaluation of local perception of valued learning outcome and capability illustrates the unfreedom which individuals have when their aspirations are unrealistic, mismatched to the real world of opportunity, where their perspective is formed from a particular world view in which their horizon is limited by circumstances of life. In the evaluation framework the real opportunities that exist are constrained, not necessarily by learning achievement, but by social, personal and economic circumstances which limit instrumental freedom.

NFE Attenders Aspirations

Non-formal education is provided to children and adults in Bhutan who are too old to enrol in mainstream school. Classes are initiated through a process of community application and local commitment to construction of the facility, which in itself is an indicator of the perceived value of basic education within each community. Children attending NFE classes in this study generally aspired to learn local skills within the scope of their life and livelihood experience, related to agriculture and forestry. The parents of NFE attenders believed that their children would have slightly better opportunities after completing the course and they generally had realistic expectations that their future local paid employment opportunities are limited. The main improvements in well-being relating to learning outcomes were positional, identified as literacy skills which would at least give the NFE learner a higher status within the community, for example as a reader or writer of letters. There was also a hope that, for the younger learners, there would be the opportunity to move into mainstream education and ultimately to better paid jobs.

Freedom, as individual capability to develop and to live a life one values, is measurable by inclusion and exclusion criteria that operate within the local learning environment. One child who would have liked to become a teacher understood, correctly, that this opportunity is now closed due to her limited level of basic literacy and numeracy and her exclusion from mainstream education. A localised framework for evaluation of learning outcome and capability, designed to reflect an individual's range of choice would be able to indicate what each individual can and cannot choose to learn at any given stage of development.

None of the NFE learners or their parents were informed of what kind of future opportunities were available to children in relation to each level of school certification. This was outside their personal experience, almost no-one from their local community having completed school to a level of certification. Here the social and economic circumstances of individuals can be seen to impact on individual freedom to improve their lives through learning suggesting, within the evaluation framework, the need to capture different world views and impact of positions of relative powerlessness.

In addition to future aspirations, the evaluation framework needs to consider the reasons why children are attending NFE classes. The main reason for attendance at non-formal classes was that children had missed the opportunity to attend school when they were the correct age. In most cases school was too far from home for small children to attend daily and there was no boarding facility or it was considered unsatisfactory for a child to board

alone without adult care. In many cases children were also needed at home and this outweighed any value parents might place on education. The reasons applied differently to girls and to boys according to family circumstances and to cultural expectations and conventions. For example in some study locations boys were sent to school at a younger age than girls even when the distance to school was far but they were not be able to complete their education as they were needed at home once they were physically strong and able to help on the family land. This is reflected in the gender variations between NFE classes and basic education classes (Annex 2, Table 13). Such issues may be included in a performance-based evaluation framework of learning outcome. In the Bhutan study for example, the gender parity ratio for poor, rural school attenders aged 6-12 years old is estimated as 60% boys to 55% girls (Royal Government of Bhutan National Statistical Bureau, 2004), whereas among NFE students 70% are female. This is counterbalanced by the favoured opportunity for boys to enrol in monastic education – an estimated 15,000 boys were estimated to be enrolled in monastic education compared to 110,000 school-going children (Royal Government of Bhutan Department of Planning, 2002b). Taken beyond the simple recording of reasons for NFE attendance, disaggregated analysis can be used to identify ways in which learning outcome impacts on aspirations and opportunities for individuals to improve their lives.

School Attenders Aspirations

It might be expected that school attendance enhances children's aspirations by making future opportunities more realisable. School attendance, to varying degrees, broadens the child's world view of what opportunities may be open to them as outcomes of formal school learning. The findings suggest that, for children in formal education, learning choices and aspirations are directly related to progression through the school system. Performance at one stage in the formal system determines, quite definitively, the options open to the individual at later stages, depending on the particular national and local system of education. The options in this respect are less bounded outside the domains of formal learning. The formal and informal options vary from place to place within and across national systems.

Children who attend school hold higher expectations for the future than their non-school-going peers and want to complete school for the potential rewards this offers in terms of career opportunity and the associated anticipated financial gain. Undoubtedly more opportunities are opened the further through school one can progress and the higher the level of certification one can gain, whether individual children who are in a position to do

so choose to take up those opportunities or not. Job-related aspirations are generally realistically set in the sense of not being overly ambitious, for example beside those children who aspire to professions such as teaching and nursing, children also aspire to be a taxi driver, a lorry owner, a carpenter or join the army. Rural school-attenders in the Bhutan study aspired to pursue a profession, most commonly as a teacher, but they qualified this aspiration with the real opportunity, as a fall-back position if unsuccessful in securing paid employment, "to come back home and apply what we have learned in school". Urban children tend to be aware of a greater range of employment opportunities than their rural peers, presumably due to greater exposure to the opportunities which exist.

Children also described a wide range of learning outcomes other than cognitive domains of school learning the achievement of which they aspire to, such as being able to care for the family, "to serve my country so long as I have enough for myself", to be happy, to serve the community, to protect the forest for the future and to be able to do a job that is less physically tiring and financially unrewarding than the work of their parents. The implication from this observation of aspiration is that a broad range of learning outcomes are identifiable, in the domains of social relations and social organisation for example, that have intrinsic and positional value to individuals clearly influenced by current social policy such as advocacy for sustainable development. The evaluation of these learning outcomes as constructive processes can be made by tracing progress over time or by considering the extent to which the school and wider environment enables these learning opportunities, focusing attention on capability rather than on functioning.

Non-Attenders Aspirations

There was a noticeable difference between school attenders and non-attenders in the level of practical knowledge and confidence they expressed in relation to their future aspirations. For school attenders the realities of what may or may not be achievable appeared to be somewhat remote from their daily life at school whereas non-attending school-age children in the study were able to clearly articulate realistic aspirations and to describe in detail how they would achieve their aspirations. The aspirations of the non-attending children were also far more individualised, diverse and specific than those of their school-attending peers. For example, a girl who left school before completing basic education described the aspiration she has to develop a small business she has already started, selling manure in a locality which is dominated by large scale tea estates and small scale vegetable growers. She had passed Grade 5 examinations and was already

promoted to Grade 6 when she left school but could not give any particular reason for leaving. She described her perception of the instrumental, intrinsic and positional value of her present situation.

> It is important to learn how to do good business - I can earn money from selling compost and I can use the money to buy more equipment and tools for the job. We must learn how to spend and save our money and to invest it in the business. I have just started the compost business. We have one cow in our house. I haven't asked for any help from my parents. We take the leaves and put them in the cow shed. The cows crush the leaves and they manure it. Then it is put in the pit. It is spread on the ground to dry a bit and then put onto the vegetable beds and put into bags for sale. [non-attending girl, rural Sri Lanka]

The girl demonstrated that she had some local knowledge and opportunity which she had converted into the basic capability to develop a small business. None of her school-going peers described similar initiatives. Her responses indicated that this was her preference and that the immediate benefit of her enterprise to the family was valued more than continuation of school learning.

Similarly, a boy who left school after failing a grade exam when he was five years over-age, had clear and optimistic ideas about a range of local opportunities open to him.

> We can bring timber and bamboo from the forest for house construction. We can learn those skills from home. We don't need a teacher. I am already learning to drive a friend's tractor. I hope to have a tractor of my own and stay in the village to do the farm work. I am learning traditional painting from a craftsman in the village. The gomchen (lay monk) is teaching me masked dancing and when I dance in the festival I get paid for it. [non-attending boy, rural Bhutan]

In this case school was a negative experience whereas there was instrumental, intrinsic and positional value and variety to the learning opportunities he was experiencing outside school.

The basic skills and knowledge described in such examples indicate a wide range of locally relevant valued learning choices, not observable from performance-based evaluation of learning. This learning would be observable through relevance-based evaluation but not necessarily in relation to individual freedom to improve ones life. It

suggests that a capability-based evaluation of real-life situations of informal learning outcome can identify individual learning outcomes and corresponding enhancement of basic capability.

Analysis of Rural and Urban Aspirations

The Bhutan study provides information from three contrasting learner groups: (i) those from very remote rural areas; (ii) children from the same location who attend high school far from home, though still rural, as boarding students, and (iii) their urban peers. Analysis indicates that the more remote populations, and girls within those populations, including school-goers, non-attenders and NFE students, tended to have little idea of opportunities that are open to them on completion of various levels of formal school qualification. Parents from the more remote communities were not aware and informed of options since, as they stated:

> We don't have experience of what the children can do – only one child from the village has completed Grade 10. After education some children get a job and others get nothing. None who have gone away to school have come back to the village [parents, rural Bhutan]

The majority of boys from the same populations seemed, from their responses, to be more informed of choices, more ambitious for the future and less resigned to adaptive preference-type responses of the girls who tended to hold the view that "we wont get any job opportunities". This may be a reflection of the matriarchal society in which girls inherit the family home and land, placing more pressure on boys to pursue a career and establish their own independent life, possibly requiring different sets of capabilities. It may also reflect the fact that children will almost certainly have no choice but to live away from the family land for high school education or move to an urban centre for paid employment. This was expressed by parents as more worrying for girls than for boys, "at least until they are married".

The main difference in responses between children and parents in the Sri Lanka urban and rural populations was in the range of choice and set of opportunities available to children at each level of formal school qualification. The rural population focused on limited local opportunities in the tea estates and garment factory for example while the urban group focused on a wider range of jobs prevalent in their location such as security guard, hotel work and working in communications and internet centres.

This demonstrates the need to evaluate learning outcome and capability considering the pluralities of condition that includes individuals' awareness of the range of opportunity, as well as level of certification and livelihood opportunity. The stage of development of the local education system, the related level of education of the local population and the similarly related world-view of the local population are also relevant to the evaluation of individual capability. The local perspective includes differentiation between children and their parents especially where there is a division and transition between the younger and older generations in terms of learning experience and opportunity.

RANGE OF VALUED CHOICE

Individual capability, as the opportunity to improve through learning, is a function of the range of choice open to each individual. Freedom of choice in learning outcome and opportunity includes the valued choices individuals have (or do not have) to access learning, to learn particular skills and knowledge, and to learn in one way or another. The degree to which the individuals' aspirations are realistic and achievable will be determined by the range of valued choice in any of these aspects. At one extreme an individual may have no choice in accessing formal learning opportunity, for example where there is no school, no teacher, lack of financial or other essential learning resources, personal restriction such as a disability, or socio-cultural restriction such as gender or language barriers. At the other extreme the individual has a wide and informed choice in accessing a range of different learning opportunities and environments.

An individual who potentially has access to a range of choice in what she can choose to learn may have cultural restrictions such as gender limitations to freedom of choice or entry conditions such as specified combinations of subjects or location of learning. Such choices are conditioned by context (time and place) including different individual and dominant social values. The range of choice will include some options which are more valued by the individual than others and may not include all the learning preferences of the individual. It is assumed that the range of choice at any stage and for any individual is a determinant of their freedom in terms of their future potential to develop and improve their lives through learning. More choice of learning opportunity suggests greater freedom while less choice suggests restriction of freedom to improve ones life. However these assumptions are simplistic and may be qualified by the following considerations. Evaluation of how the learner chooses from available options may be significant in its effect on actual outcomes and capability as in the case, for example, of the learner who makes a well-informed choice from limited options compared to the learner who has

more options but is poorly informed, effectively limiting actual choice. The learner needs to be able to make an informed choice, through an understanding of the value of the choices available to her, whether the choices are few or many.

The benefits of becoming functionally literate are clear in terms of the expansion of opportunities (capability) open to the literate person. If a person has the opportunity to become literate, but chooses not to, this is her choice whereas the person who does not have the opportunity to become literate is deprived of the choice to become literate or not. Innate and external conditional factors can be identified in the context of literacy capability which may be generalisable to other capabilities. One condition is the innate potential of the individual to become literate or not. External conditions, such as access to books, a teacher, language of instruction and media of instruction used, and the cultural freedom to become literate also limit or expand individual capability. An evaluation framework which includes descriptors of the positional value of learning, conditions relating to innate potential and descriptors of the external learning environment broadens the performance-based framework and provides structure to the relevance-based framework.

The theory of equality of condition (Lynch and Baker, 2005) focuses on "equalizing what might be called people's 'real options' (which) involves the equal enabling and empowerment of individuals" (p.132). Working and learning is identified by Lynch and Baker as one of the key dimensions of equality. Inequality of condition is identified with the role of education in producing social class inequalities, inequality in recognising diversity in education, inequality in power through undemocratic processes inherent in education systems, and inequality through neglect of emotional intelligence. Each of these dimensions could form a framework for a capability-based evaluation of learning outcome, each dimension affecting individual aspirations and impacting on perceived instrumental, intrinsic and positional values of learning. Equality of condition makes the case for social policy which provides each individual with equal prospects for achievement of a good life. The outcome of the social process of learning is not, then, intended to be equal. Evaluation of equality of condition would measure individual outcome defined by individually relevant parameters.

Evaluation of range of valued choice includes the choice an individual has as to how she learns, for example the contrast between no choice in the case of extreme indoctrination and extreme state control or freedom of choice in the case of pluralist approaches to open learning which encourages critical and creative thinking. This evaluation element

describes the characteristics of the learning styles offered to the learner. It includes choice relating to levels of participation and decision making as an active or passive learner, which will impact on the capability of the individual in future learning. It corresponds to several elements of the civil liberties checklist (Freedom House, 2000) used to monitor and evaluate freedom globally. The checklist refers to equality of opportunity, implying "a free choice of employment and education. Extreme inequality of opportunity prevents disadvantaged individuals from enjoying full exercise of civil liberties". The checklist acknowledges the effect of lack of economic opportunity and other liberties. It also recognises the effect of "extreme government indifference and corruption ... included to highlight that the human rights of a country's residents suffer when governments ignore the social and economic welfare of large sectors of the population". This element of evaluation focuses attention on the root causes of dysfunctional systems and the influence of this on individual capability deprivation.

Between the extremes in valued range of choice from no choice to full choice are all the variations which may be applicable, but different, for each individual. Variations and differences in levels of individual freedom apply to cultural restrictions for girls, economic restrictions for poorer families, environmental restrictions for remote communities and social or personal restrictions for unschooled people, for example. Given the potential issues which are identified in the study, evaluation of the range of valued choice could be as simplistic as identifying a level for each individual within a range from no choice to full choice on any of the following identifiable criteria: the range of access to learning environments (centres of learning, quality of teachers and knowledgeably skilled individuals, availability of required resources, personal dispositions, social conditions); the range of learning domains open or closed to the individual according to time and place, and characteristics of the learner; the characteristics of the learning style that is offered (practical application, theoretical, learner, subject or teacher centred). The evaluation framework can then incorporate some measure of the inequalities that exist between learners, and the extent to which they are perpetuated or reduced through learning opportunity and social policy, analysed as enhanced capability or capability deprivation.

CONCLUSION

For children living in situations of urban or rural poverty, the basic capability to achieve one's aspirations to achieve an improved quality of life is particularly relevant through, for example, the equality of opportunity to pursue a reasonable livelihood. Analysis of

local perceptions of instrumental, intrinsic or positional value of learning opportunities provides insights into the ways in which preferences and choice are influenced by social policy. Learner perceptions of value illustrate the high value placed on academic achievement through pressures of school and examination systems in contrast to valuation of achievement in other areas of learning such as vocational and life skills. Variation in the perspectives of different learner groups suggests that instrumental, intrinsic and positional values are adjusted according to the context of the individual. The range of choice open to each individual varies and evaluation of learner outcomes and basic capability cannot therefore be limited to standard metrics of learning outcome applied to all learners.

In the next chapter the data is analysed to identify broad generic categories of learning identified as valued by the informants. A procedural methodology is used as a means of defining lists which can accommodate a diverse range of contexts and perspectives and which provides a structure for the evaluation of an individual's basic capability to be educated and evaluation of learning which is foundational to the enhancement of other capabilities.

Chapter 8. Defining Lists of Capabilities

INTRODUCTION

This chapter aims to define broad generic categories of learning identified as valued by the informants. A procedural methodology is applied and assessed as an alternative to the methodologies used in performance-based and relevance-based evaluation. The defined lists, drawn from informant discussion, are used to understand the complementarity of information provided by each of the three evaluation methodologies and the added value which a capability-based approach provides.

The analysis starts by applying Robeyns' procedural approach as a checklist to the process of defining of lists of valued learning and capability (Robeyns, 2003, pp. 70-71). The procedural approach provides a rationale and justification for defining lists, which is a means of validation of the criteria used in the process. This procedural starting point operationalises a capability-based approach to evaluation of valued learning, focusing on functionings as actual learning achievement and capability as opportunity arising from learning. Capabilities, as freedoms and unfreedoms, are not directly observable and have to be inferred from defined functionings, focusing on future opportunity valued by the individual. The lists of valued learning outcomes include descriptors of achieved functionings of the individual, for example "behaves in a socially acceptable way" and inferred descriptors of future opportunities or capabilities, for example "is able to live harmoniously with others around her" [Sri Lanka rural sample responses]. The distinctions between functioning and capability are further drawn out in the discussion that follows, describing each generic dimension of valued learning.

A Procedural Approach to Defining Lists of Capability

Robeyns procedural approach provides criteria to be used in the process of defining generic lists of valued learning and capability (2003, pp. 70-71), outlined in Chapter 3. The procedure serves as a rationale and justification for validation of the list developed here. The five procedural steps are: (i) the criterion of explicit formulation; (ii) the criterion of methodological justification; (iii) the criterion of sensitivity to context; (iv) the criterion of different levels of generality; (v) the criterion of exhaustion and non-reduction. Each procedural step is applied in this study as described below.

Step 1 - Explicit Formulation

The list is explicitly formulated from informant responses using an a priori assumption that local perspectives on valued learning are equivalent to learning considered by the informants to be important and an ex post facto process of analysis of data derived directly from informant's description of learning they consider is important for improved quality of life, based on their value perspective.

Scrutiny of performance-based and relevance-based approaches illustrates tensions between the two approaches at this first methodological stage of formulation of lists. Performance-based evaluation is explicitly formulated within the range of formal school learning outcomes irrespective of the wider context of children's lives. In contrast, relevance-based evaluation lacks a clear procedure for discussion and defence of the diverse range of methodological approaches that may be applied, though sensitivity to context is a core focus of the methodology.

Weaknesses with this procedural stage include assumptions relating to informants' ability to articulate their own perceptions in the course of relatively brief sessions of data collection, and issues of interpretation of information in the data collection and analysis process. These limitations appear to some degree in any research methodology. In the evaluation of valued learning they can be minimised through awareness of particular interpretations that may be introduced in the process of exchange of information and, as in this study, through the use of locally knowledgeable evaluators trained, for example, to probe for clarification of ambiguities in the process of explicit formulation.

Another difficulty with explicit formulation is that capability can not be observed but only surmised from achieved learning. Also that explicit formulation of future learning opportunity is based on speculation and prediction. To counter this, capability associated with valued learning was elicited from the informants through discussion on learner aspirations for the future and opportunities which, from their perspective, are open or closed to them. Capability was thus linked to the reasoning and explanation behind individual responses such as local perspectives on why particular skills, knowledge and attitude to learning are considered important for a 14 year old in that particular community.

Step 2 - Methodological Justification

At the second stage of methodological justification an iterative process of coding and

categorising of informant comments was used, from which the list of generic dimensions is generated. It is acknowledged that the methodology is fundamentally and pragmatically incomplete (Alkire, 2002, p. 10) because of the difficulty of defining all learning and of recording all instances of learning. However, the methodology for defining lists was appropriate to the purpose since the aim was to describe generic dimensions of learning and capability which are on one hand universally applicable and on the other hand can be individually realised. Responses were coded and sub-coded using an iterative process to generate higher level generalisations inclusive of all responses (Annex 11, Tables 21-23). By generalising from individual descriptions, comments from the non-formal learner who was knowledgeably skilled in yak herding could be coded and evaluated, as could the school dropout from a tea estate workers' family who was starting her own compost business and the urban school-goer who had computer skills and hoped to become a teacher. Each of these individuals were asked to respond to the question "What is it important for you [your child] to learn in order to improve your [her] life?". Each informant could be identified by a different combination of codes relating to her perspective on valued learning. This expands the boundary of performance-based categorisation and contains relevance-based evaluation as learning which the individual perceives may improve the quality of her life.

Methodological justification relates to the purpose of the evaluation. In performance-based approaches the list is generated from curriculum content and milestones in cognitive learning against which the learner is matched, justified as addressing the purpose of evaluating system-level efficiency. In relevance-based approaches the list is generated from the particular socio-cultural setting and focus of study, justified for the purpose of understanding learning relating to the specific context. In a capability-based approach the purpose of the evaluation is focused on the impact of learning on individual opportunity. This includes cognitive learning outcomes and relevance of learning, while also identifying diverse learning outcomes as enhancements to basic capability and individual freedom. The purpose and methodological justification of opting for one evaluation methodology or another also reflects the evaluator's interest in the instrumental, intrinsic or positional value of learning to the individual and the match between external valuation of learning with the learner's value perception.

Step 3 – Sensitivity to Context

This study focused on personalised local perspectives of valued learning in contexts of rural poverty. These perspectives represented diverse contexts, abstracted to higher levels

of generalisation of learning outcome and capability, such as livelihood learning, that were generally applicable across research sites. Within these categories, multiple descriptors were elicited as indicators to sub-categorise the aggregated data so that a wide range of perspectives were captured, no data was excluded and generalisable data was merged.

Data elicited from the informant responses provided descriptors, focused at local level, to enable contextualised definition of capabilities in relation to the impact of learning on quality of life. Contextualised descriptors of capability could be generalised to higher levels of abstraction, for example in the case of functional literacy which, once achieved, provides an individual with the potential to participate in future literacy-based learning opportunities. In other cases basic capabilities were more context-specific, for example the subsistence farmer's knowledge of basic life skills which provides the foundation for future learning and improved well-being in a particular local context. Threshold levels of learning were also identified where learning achievement overcame a barrier to future opportunity and where failure created a barrier to future opportunity. Performance-based evaluation measures standardised threshold levels of learning that are not sensitive to context, for example high stakes examinations which mark a threshold to the next level of learning. Relevance-based evaluation measures threshold levels of learning specific to particular contexts, for example learning a livelihood skill to a locally recognised level of accomplishment such as weaving cloth which is marketable. The capability-based approach expands the evaluation by using context-relevant criteria with the additional possibility that aspects of valued learning can be matched with learning outcomes that are generalisable across contexts. The procedure is then sensitive both to context and to generating levels of abstraction.

Step 4 – Ideal and Pragmatic Levels of Generalisation

The fourth stage in the procedure is used to identify two levels at which lists can be defined: an "ideal" level which is unconstrained by data or measurement limitation and another level which is "pragmatic". An ideal list is, in this case, the fully comprehensive list of all generic dimensions of valued learning and capability. The pragmatic list is a subset of the ideal list which has different representations depending on local perspectives and contexts and which acknowledges the reality of data and measurement limitations. A pragmatic list of fundamental capabilities and threshold levels of learning has been developed from the data. The list was different for each population being studied, providing an indication of the extent to which each population studied achieved or fell

short of the ideal definitions. Indicators were selected from the pragmatic list of valued learning based on the purpose of the evaluation.

Performance-based lists of learning outcomes start with an "ideal" and unconstrained list constructed, for example, within a global model of basic learning which is good for all children, considered a universal basic right of all children. This ideal model has different "pragmatic" representations depending, for example, on the cultural perception of whether the child is viewed as an empty vessel to be filled with a standardised body of knowledge or is viewed as an individual with potential to be nurtured and enabled to flourish. The pragmatic view is constrained to measuring learning outcome in narrow cognitive domains of school learning. Relevance-based lists of valued learning tend to focus primarily on pragmatic levels in particular contexts, such as learning specific to youth culture, from which ideal levels of generality are determined within the value boundaries of the particular population. The capability-based approach takes an "ideal" list as being that learning outcome which would provide each individual with the freedom to achieve that which she values. The "pragmatic" list is defined from individual perceptions and practical limitations in measurement of outcome, reflecting incompleteness as an acknowledged characteristic of social analysis.

Step 5 – Exhaustion and Non-Reduction

At the fifth stage the methodology ensures as far as possible that all perspectives are heard and represented in the list. Descriptions are merged into common groupings of ideas but descriptors are retained in the database for reference. Aggregated data can, if necessary, be disaggregated and re-grouped as in the analysis Chapters 5 to 7.

As part of the process of exhaustion, aspects of valued learning not explicitly identified from local informant perspectives need to be considered in data collection and analysis, in addition to those aspects of valued learning which were described by informants. For example, some informant groups gave little mention of learning to live in social harmony and participation in social organisation which may be considered a generic dimension of relevance to all populations. Such information gaps were due to informants' lack of opportunity to share their views on these topics, constraints in their ability to articulate their views, limitations of time in which data was gathered, and lack of familiarity with the researchers. These factors are indicative of variance between populations and may be incorporated into an indicator which measures learning outcome as the freedom or unfreedom each individual has to realise basic capabilities. Performance-based evaluation

is limited to a selected band of objectively measurable learning achievement, exhaustive within its defined boundaries. Relevance-based learning, focused on context specific learning achievement, is loosely bounded and is more difficult to define as exhaustive. Capability-based evaluation acknowledges the fundamental and pragmatic incompleteness of the data set, and exhaustion is based on natural limitations of individual reason (Alkire, 2002).

OPERATIONALISING A PROCEDURE TO DEFINE LISTS OF LEARNING OUTCOME AND CAPABILITY

The five procedural points provide a foundation for defining any list of generic dimensions of functioning and capability. Key issues raised at this stage in the process of defining lists of valued learning and capability were concerned with levels of generality and ambiguity in the definition of categories, legitimacy in terms of representativeness, and the rejection of the idea of defining one universal list.

Robeyns' procedures do not explicitly provide guidance on categorisation of ambiguous and non-discrete statements of learning outcome and capability. Some informant responses clearly fitted into one distinct sub-category or another while others fitted into more than one sub-category. For example it was difficult to evaluate the extent to which basic numeracy skills acquired in NFE classes enhanced household financial security and how such learning was applied by each learner in everyday life. Where there was some ambiguity, a decision had to be taken as to what the evidence showed and what could be elicited or surmised regarding actual value and associated capability enhancement. Unlike performance-based categories of learning achievement with explicitly and externally defined domains of formal learning, a clear delineation in this study was not practical or desirable as the data was essentially not divisible into such discrete compartments. The thick description serves to indicate inter-relationships between specific cross-sectoral areas of learning through which to understand connections between valued learning and capability for a particular population.

Legitimacy of the defined lists is raised as a concern to be addressed before proceeding further. "An illegitimate process will result in illegitimate outcomes" (Robeyns, 2005, p. 9) most crucially where it is non-representative of those to whom it applies, therefore lacking political legitimacy. This also raises the question of whether it is necessary or valid to seek one defining list. In this study the legitimacy of the process was based on three factors: (i) the list was defined from local perspectives of informants; (ii) the list was defined and contrasted with performance-based and relevance-based lists, for the

purpose of complementing and expanding the range of learning outcomes which could be evaluated; (iii) the defined list was intended to be generic, clearly defined as a framework applicable to a range of contexts of valued learning for 14 year old children, not defined as a universal theory of learning outcome. A distinction is drawn between legitimising of generic definitions used in a capability-based approach under which pluralities of learning outcome can be accommodated, in contrast to legitimising of performance-based universal definitions which standardise and de-contextualise cognitive skills and knowledge. The implication is that "democratic processes and social choice procedures [are used] to define the distributive policies", complying with the requirement that "when the capability approach is used for policy work, it is the people who will be affected by the policies who should decide on what will count as valuable capabilities in this policy question", which demands public participation in the process (Robeyns, 2005, pp. 5-8).

This study engaged with the participatory and legitimating process by operationalising a framework approach to define capability in line with Sen's approach which advocates that specification be drawn from evidence of improved well-being or well-being deprivation (Alkire, 2002, p. 29). This differs from a universal pre-definition of capability favoured by Nussbaum (2000, pp. 70-96). It is intended that generic dimensions will be available for policy makers to draw on so that evaluation of learning outcomes is framed to represent local value perspectives and indicators of individual capability enhancement and deprivation. This moves beyond the scope of relevance-based evaluation, to legitimate measures of learning outcome and future opportunity of the individual as a means of influencing social policy. In addition the capability-based approach can be used, reciprocally, to evaluate the influence of social policy on learning outcome.

In the following section each generic dimension of valued learning outcome is described with three purposes in mind: first to consider ways in which to describe capabilities surmised from achieved functionings; second, to demonstrate the complementarities and added value of the capability-based approach alongside the performance-based and relevance based approaches; and third, to demonstrate the ways in which Robeyns' procedural approach can be applied to generate and validate the list of functionings and capabilities.

IDENTIFYING GENERIC DIMENSIONS OF VALUED LEARNING AND CAPABILITY

Four generic dimensions of valued learning and capability have been summarised from the data analysis, categorising informant descriptions of what they consider is important

for 14 year old children to learn under four broad headings of: (1) functional learning, (2) basic skills learning, (3) social learning and (4) learning associated with agency freedom and capability. These headings are proposed as the generic dimensions of valued learning, which conform to the five procedural steps, having been generated from an iterative process of coding, grouping and re-grouping of informant comments. Table 1 illustrates one stage in the process of coding. A detailed description of the coding procedure and coding categories is given in Annex 11.

Table 1. An Example of Coding and Sub-Coding of Informant Descriptions

				Descriptor	Where learne	Sub-code
rural	mother/father	g/b not attending		How to be with others	community	2.12
rural	mother/father	g/b not attending		There are still many things we can learn from the community.	community	2.12
rural	mother/father	not attending	sp.needs	lighting the fire	home	5 13
rural	mother/father	g/b not attending		household work	home	5 16
rural	mother/father	not attending	sp.needs	job skills	school	4.22
rural	mother/father	not attending	sp.needs	reading and writing - not functional	school	6 13
rural	mother/father	g/b not attending		All the skills I have learned from the community	community	3 35
rural	mother/father	not attending	sp.needs	learning to memorise and remember things	school	6 17
rural	mother/father	g/b not attending		The morals learned are more important.	community	2.44
rural	mother/father	not attending	sp.needs	playing musical instruments	school	2.32
rural	mother/father	not attending	sp needs	money management - saving through provident fund	home	4.26
rural	mother/father	not attending	sp.needs	how to use provident fund wisely	home	4.26
rural	mother/father	g/b not attending		sewing / stitching	home	1.16
rural	mother/father	not attending	sp.needs	shopping	home	4.25
rural	mother/father	not attending	sp.needs	learning skills	school	6.14
rural	mother/father	g/b not attending		all the things I can do in the estate.	community	3.36
rural	mother/father	g/b not attending		I used to go to work with parents and learned how to make flower beds, drains, etc.	home	3.25
rural	mother/father	g/b not attending		cultivation is the best thing we learn - can put it into practice	home	3.25
rural	mother/father	not attending	sp.needs	watering the vegetable garden	home	3.25
rural	mother/father	not attending	sp.needs	bringing water	home	5.19
rural	mothers	boys attending		We see bad things in the community	community	2.43
rural	mothers	boys attending		and so we try to prevent our children from doing these things (fathers drinking liquor and spending money they car	community	2.43
rural	mothers	girls attending		I learned how to behave in the community. - m20	home	2.43
rural	mothers	girls attending		There are different types of people in the village so we have to neglect those who are not good for us - m21	community	2.43
rural	mothers	g/b attending		Manners – how to be in the society	home	2.43
rural	mothers	g/b attending		How to behave in society - manners	community	2.43
rural	mothers	g/b attending		Children should be taught how to behave in the community	community	2.43
rural	fathers	g/b attending		I had a bicycle at home which I could ride	home	4.32
rural	mothers	g/b attending		CCF gives knowledge about how to be with children and bring up the family from programmes they implement	community	2.11
rural	mothers	g/b attending		– how to bring up our children and build their characters	community	2.11
rural	mothers	girls attending		My father was a carpenter and so I learned a little - m19	home	1.12
rural	mothers	girls attending		Learning to be a big person – learning by being with different people.	community	2.14
rural	mothers	boys attending		We can participate in the community meetings even though we have not been to school.	community	2.12
rural	mothers	girls attending		I can do some masonry and carpentry such as using the plane as an adult - m24	home	1.31
rural	fathers	g/b attending		I know how to make cement bricks as I learned in a previous job	community	1 31

Note: The right hand column sub-codes correspond to the codes listed in Annex 11 Table 22.

Statements from discussion were grouped together and refined by merging and re-organising sub-categories resulting in the four generic dimensions of valued learning outcome (Table 2). The generic dimensions form an ideal list of valued learning from which a pragmatic list can be selected. This broadens the list beyond the scope of performance-based evaluation which is limited to evaluation of a pre-defined, standardised list of cognitive learning outcomes. The identified generic dimensions constrain the scope of relevance-based evaluation by structuring the informant descriptions of learning outcome and basic capability.

Table 2. Categories of Generic Dimensions of Learning Outcome developed from informant description

1. FUNCTIONAL LEARNING **1.1 Livelihoods Learning** Livelihood skills and knowledge Technical skills How to manage a business Buying and selling Quality of product Different types of work Terms and conditions of work Range of employment/ livelihood opportunity Employment / livelihood training opportunity Applying for a job **1.2 Household Management** Water management Finance Management Home Maintenance Clothing Household Chores Family Health	**3. SOCIAL LEARNING** **3.1 Social Relations** Interpersonal relations Social responsibility Socially acceptable behaviour Cultural Skills Participatory Arts Participatory Sports **3.2 Social Change** Different world views / exposure Traditional skills and knowledge Technological change Transportation Health **3.3 Social Organisation** Care of the Environment Participation Representation Rights and Exploitation
2. BASIC SKILLS LEARNING Literacy Skills Numeracy Skills Communication Skills Study Skills Continuing Education	**4. LEARNING FOR AGENCY FREEDOM AND CAPABILITY** Empowerment Decision-making Autonomy Self-determination

Generic dimensions (1) functional learning and (2) basic skills learning have more tangible and measurable learning outcomes whereas dimensions (3) social learning and (4) learning associated with agency freedom and capability focus the scope of evaluation on less tangible outcomes. These less tangible outcomes may nevertheless be prioritised in the evaluation of expanded opportunity and individual freedom. Life skills is a cross-cutting dimension of learning embedded in each of the four generic dimensions as they relate to basic learning that each individual needs to function effectively in life. For example, functional skills and knowledge about vulnerabilities and risks could relate, as life skills, to family health, running a business or adapting to social change.

Performance-based evaluation focuses on aspects of dimension (2) basic skills learning. The focus is sensitive to context (Procedural Step 3) but is not exhaustive of each individual's range of basic skills learning (Procedural Step 5). For example, indigenous literacy skills would generally be outside the scope of performance-based evaluation. Relevance-based evaluation could select elements of any of the four dimensions focussing on the application of learning to the local cultural context, for example learning

perceived as valued by an ethnic minority group or intergenerational transfer of indigenous skills and knowledge. The capability-based approach focuses on any combination of the dimensions relevant to the individual, as functionings that affect the individual's basic capability to be educated and as learning outcomes that are foundational to other basic capabilities.

Generic dimension (4), learning for agency freedom and capability, is conceptualised through the capability approach and requires further clarification at this point. Agency freedom is understood as the freedom one has through empowerment and participation to bring about achievements one values including, for example, access to information about learning opportunities and the freedom to make informed choices without coercion (Unterhalter and Brighouse, 2007, pp. 103-104; Vaughan, 2007, pp. 162-163). Agency is a sub-set of capability. Capability is cross-cutting across all dimensions for the future potential value any aspect of learning offers and as such is a fundamental dimension of learning that enhances or restricts all other more tangible skills and knowledge learning outcomes.

The generic dimensions of valued learning most frequently referenced by all informant groups related to functional livelihood skills and knowledge indicating, without using robust methodology for weighting of comments, that this is given a high ranking in terms of importance to young learners. The descriptions under this dimension were not homogenous but covered a broad range of issues relating to valued learning outcomes many of which were specific to time, place and individual learner, impacting differently on actual learning outcome and improved well-being. Other dimensions of valued learning varied between informant groups. The Bhutan informants described homemaking skills, environmental protection, literacy and learning, social pastimes and health information as valued learning, in order of frequency of occurrence. In the Sri Lanka study learning associated with moral education and appropriate social behaviour were the categories most frequently mentioned, with literacy and learning, living in harmony, and homemaking skills raised in discussion less frequently. It is assumed that this pattern of responses reflects local levels of prioritisation of valued skills and knowledge but it is not intended to demonstrate statistical significance. These observable differences and commonalities in responses indicate the need to accommodate diversity and pluralities of valued learning in the evaluation methodology, applying Procedural Step 4 to determine the pragmatic list applicable to each evaluation context and purpose.

Dimensions of Valued Learning and Capability – Interpretation and Implications

In this section each of the generic dimensions is summarised. The complementarities of the capability-based approach to the performance-based and relevance based approaches are discussed. In addition, implications emerging from the process of defining categories of valued learning and capability will be identified. A selection of key descriptors are drawn from the data and tabulated in each section to illustrate elements of functioning and capability for each generic dimension of learning outcome.

Functional Learning

The list generated under the heading of functional learning draws attention to the actual learning achievements which informants described as important, directly related to their personal learning experiences and corresponding basic capabilities (Table 3). Functional learning of livelihood and household management skills and knowledge is primarily instrumental, functional in daily life with a measure of tangible outcomes of improvement to the well-being of the individual.

One observation is that, for a particular capability to be realisable, the individual has to have achieved all related functionings. For example, the basic capability to be financially secure may require achievement in a range of functionings such as application of basic numeracy skills, access to information about saving schemes, availability of schemes and eligibility criteria, personal skills to be able to deal with local levels of crime and corruption, and awareness of socially responsible behaviour to ensure that savings are used for the well-being of the family. This example illustrates a many-to-one correspondence between functioning and basic capability which calls for evaluation of a range of learning outcomes. In other cases one learning outcome can impact on a range of capabilities. For example, functional learning of water management skills and knowledge can improve the well-being of an individual in many ways and can also enhance her agency freedom to enable others to conserve water or to ensure safe drinking water supply. This analysis of functional learning indicates that ideal and pragmatic lists (Procedural Step 4) need to also incorporate the many-to-one and one-to-many relationships between functioning and capability within the pragmatic limitations of measurability, and of social and economic realities.

Table 3. Generic Dimension of Functional Learning

Generic Dimensions of Valued Learning	Functioning	Capability – surmised from functioning
LIVELIHOODS LEARNING	*Examples from study data*:	*Examples derived from defined functioning list*:
Livelihood skills and knowledge	Is proficient in basic carpentry and masonry for house construction	Skills matched to local demand / local needs in the household and wider locality
Technical skills	Has learned the basic level of skills competency	Opportunity to learn new skills and knowledge to improve production
How to manage a business	Knows the basics of running a small scale enterprise	Opportunity to develop business and finance management skills if she chooses
Buying and selling	Learns how sell the produce in the market for a fair price	Is able to apply learning to maximise entrepreneurial opportunity
Quality of product	Makes a good quality marketable product	Able to make products to a defined standard
Different types of work	Knows some options and entry requirements	Opportunity limited by lack of information access on other types of employment (negative)
Terms and conditions of work	Is not exploited by employer	Aware of fair terms of employment
Range of employment/ livelihood opportunity	Is well informed of the jobs that she could pursue	Does not have equal opportunity because of social policy discrimination
Employment / livelihood training opportunity	Does not know how to find out about training programmes (negative)	Can acquire skills for employability if she chooses
Applying for a job	Knows how to fill in application form	Has no opportunity to learn what is expected in job application process
HOUSEHOLD MANAGEMENT	*Examples from study data*:	*Examples derived from defined functioning list*:
Water management	Knows how to maintain safe home water supply	Aware of importance of and rights to safe water
Finance Management	Keeps account of family income, savings and spending	Has opportunity to learn basic numeracy and applies it to management of family savings
Home Maintenance	Knows how to make a safe electricity connection	Can access information and advice about safe house wiring
Clothing	Has basic tailoring skills and a sewing machine	Can learn more advanced tailoring skills
Household Chores	Does household chores according to age, for example: prepares food	Able to learn home-making skills according to age, free from exploitation
Family Health	Uses basic first aid and child care practices learned from the health worker	Able to learn how to ensure that the family maintains a healthy life style

Some families had been involved in village finance management training and small scale income generation initiatives. Through this they had learned how to better manage their

finances as capability enhancement. However, unschooled informants described their insecurity about financial affairs where they were encouraged to undertake what they knew to be risky but without fully understanding the risks. Skills and knowledge of financial management were particularly important to people with limited exposure to a cash economy, living at a precarious level of financial security and with a low level of formal education. Parents who had some experience of the challenges of family financial management stressed the importance of this aspect of valued learning for their children. This illustrates a particular example of vulnerability and capability deprivation when learning is not fully functional. It illustrates a possible threshold level of learning beyond which the individual has agency freedom to determine her personal risk.

A second observation is that the lists represent various pathways of learning. Inclusion of multiple pathways of learning acknowledges the diversity and range of opportunity open to learners and the corresponding diversity of interests and aspirations of learners. The inclusion of all identifiable learning pathways forms the ideal list. The pragmatic list was formulated from those learning opportunities identified from local and individual perspectives as enhancing or depriving the individual of basic capability. The pragmatic list narrowed down the focus of the evaluation framework, with the potential to vary the actual scope of evaluation from one population to another. Unlike performance-based evaluation, there is generally no formal measure to evaluate localised pathways of functional learning. Evaluation of basic capability, for example good parenting and child care skills, is based on local perceptions of performance.

Analysis of categories and subcategories provides indicators of variation between individuals that may not be captured in performance-based or relevance-based evaluation methods. In household skills learning and capability children were expected to learn a wide range of tasks which varied according to their social and economic circumstances and the age and sex of the child. Some children took the major responsibility for household management where, for example, parents worked long hours or a single parent relied on the child to manage the home. For many children from poor rural families this level of functional learning was foundational to expansion of basic capabilities, essential to the daily functioning of the home.

The analysis of the generic dimension of functional learning demonstrates that a single standardised performance-based measure of learning achievement or future opportunity would be inappropriate for the evaluation of valued learning outcome and basic capability. It also shows how a capability-based evaluation framework extends beyond

analysis of relevance to provide scope for the evaluation of pluralities in learning opportunity, to analyse learning as foundational to other basic capabilities and to identify a threshold of functionality beyond which learning is sustained as agency freedom.

Basic Skills Learning

Basic skills development is the dimension of valued learning that captures functional literacy and numeracy skills. Informant comments provided general descriptors of functioning, used to describe basic capability (Table 4).

Table 4. Generic Dimension of Basic Skills Learning

Generic Dimensions of Valued Learning	Functioning	Capability – surmised from functioning
BASIC SKILLS LEARNING	*Examples from study data*:	*Examples derived from defined functioning list*:
Literacy Skills	Has achieved functional literacy in local/home language	Has the opportunity to become functionally literate in home language
Numeracy Skills	Can do basic money calculations in the market	Has the opportunity to become functionally numerate
Communication Skills	Articulates her ideas confidently and clearly in a village discussion group	Is encouraged to articulate ideas choosing from various forms of communication
Study Skills	Has learned to listen carefully to instructions	Knows the skills that are required for continuation of learning
Continuing Education	Is studying in the NFE class	Informed of opportunities to continue learning

This dimension is generally associated with formal and non-formal school learning in its narrowest interpretation, exemplified by performance-based measures of achievement in examinations. In fact this dimension should be inclusive of other forms of numeracy and literacy appropriate to each individual's particular socio-cultural values and practices, reflected in Procedural Step 3 (sensitivity to context) and Procedural Step 4 (ideal and pragmatic levels of generalisation). This raises questions of how literacy learning is valued and evaluated, by whom and for what purpose. Oral literacy in local languages, spoken in isolated village communities of Bhutan, for example, differs from the formal school languages of instruction, Dzongkha and English.

Basic skills learning is primarily instrumental as foundational to other learning outcomes and capability. It also has intrinsic and positional importance for example as a basis of dominant perceptions of the "educated person" (Levinson, Foley and Holland, 1996). The World Declaration on Education For All endorses the premise that "education is an indispensable key to, though not a sufficient condition for, personal and social

improvement" (UNICEF, 1990). This refers to the benefits of school learning and specifically to achievement in literacy, numeracy and life skills. High expectation is placed on formal learning as a threshold beyond which learning achievement will lead to improved lives.

Formal learning was considered by the majority of parents and children as being a significant means of improving their quality of life, including functional application of learning such as being able to read a letter or complete an application form. Implicit in informant responses was a sense of empowerment and opportunity for enhanced participation. Parents and children expressed the view that parents could not participate in their children's school learning without basic skills learning and that an educated villager has more voice in community meetings. While there is truth in the hypothesis that basic skills learning empowers, there is also much evidence in this study of unfulfilled expectation when functioning in formal learning achievement does not take children beyond an economic threshold and out of situations of poverty, where the pathways of learning are not understood or are not valued as means to capability enhancement. This was observed in cases where children had completed basic education but were unable to move out of subsistence vegetable cultivation or contract labour. Performance-based longitudinal studies are effective in evaluating the longer term outcomes of basic skills learning. Variables can be controlled to provide evidence of improved quality of life, based primarily on indicators of economic well-being (McMahon, 1999).

This study provided insights into valued learning defined in the broad context of basic skills learning identified from local perspectives rather than on narrowly defined school learning alone. Basic skills included communication skills such as reasoning and articulation, and other forms of basic functional literacy and numeracy skills such as those applied in the market place, the work place and the home. Study data analysis revealed specific applications of literacy and numeracy indicating the practicalities and relevance of basic skills learning. For example, numeracy included "recognising bus numbers, being able to count and to know how to calculate in the shop and payment of bills, basic accounting skills for running a business, and numeracy needed for buying and selling in the market and for mixing the fertilizer"; literacy skills included "learning to read and communicate in our own language, being able to read a letter and fill in a form, and learning some English for when we are travelling". The significance of these comments is in the application of learning to everyday life and the inference to enhanced capability.

Comments relating to literacy skills indicate differences between rural and urban populations. Urban Bhutanese responses included, for example, the comment that literacy in local mother-tongue language was important for children to learn when families migrated from the village to the city so that they could still communicate when they travelled back to the village. Urban responses in the Sri Lanka study indicated a different literacy perspective where speech and essay writing skills, filling in a job application form, computer and typing skills, and the habit of reading were identified as important. Specific study skills mentioned in discussion included memorisation skills, listening skills and preparation for examinations and spelling tests. These reflections illustrate differences in life style, learning opportunity and the related skills that can enhance an individual's level of functioning and capability. The analysis also provides an illustration of the diversity in learning outcomes and associated capabilities which are revealed through local perspectives.

Capability in this dimension includes a strong element of agency, for example the freedom a mother has to encourage her child's learning through ensuring the child attends school, through attendance at meetings which invite parental participation in the learning process and through affordability of tuition fees. Several parents raised issues about participation in their child's learning indicating that their own lack of education inhibited participation while others suggested that all can participate regardless of their education. They also stated that in reality participation is limited to passive attendance at school meetings to hear what the school wants to communicate to parents.

In the context of basic skills learning there was evidence that some learning did not extend or transfer beyond the classroom, with implications for capability enhancement. Some parents and children indicated that they had learned some literacy and numeracy skills but were not functionally literate ie that these skills were not practiced or sustained after the non-formal classes were completed, mainly because of lack of access to literacy materials outside the classroom. Examples of application of literacy skills included ability of individuals to complete forestry application permits essential to their everyday life and reading of prayer books. In this case social policy in Bhutan had influenced individual capability where religious scripts had been translated into books for NFE literacy classes, having been identified by learners as an aspect of learning they valued. Practical, contextualised literacy learning empowered individuals, providing learning opportunity which, from their perception, had improved their lives.

Social Learning

Social dimensions of valued learning outcome include identifiable impacts of social relations, social change and social organisation on learning outcome and capability. The valued learning achievements defined in this section reflect local perspectives on individual and society values and standards of behaviour, impacts of change as local learning opportunity and the influence of institutions on the freedoms of individuals, organised in Table 5 as descriptors of functioning and basic capability.

Table 5. Generic Dimension of Social Learning

Generic Dimensions of Valued Learning	Functioning	Capability – surmised from functioning
SOCIAL RELATIONS	*Examples from study data*:	*Examples derived from defined functioning list*:
Interpersonal relations	Has learned skills for independent living	Has the freedom to live independently
Social responsibility	Helps others in family and in society to work together in harmony and peace	Characteristics of tolerance and cooperation are encouraged in personal social relationships
Socially acceptable behaviour	Obeys teachers and shows respect for elders	Not coerced into socially acceptable behaviours but through reasoned judgement learned as life experience
Cultural Skills	Knows cultural / traditional / religious practices	Has opportunity to participate in local practices
Participatory Arts	Can play musical instrument	Has the freedom to express herself through arts
Participatory Sports	Participates in sports and games	Able to participate in group sports and games
SOCIAL CHANGE	*Examples from study data*:	*Examples derived from defined functioning list*:
Different world views / exposure	Information, knowledge and skills learned from visiting new places	Freedom to travel and learn from new environments and experiences
Technological change	Has learned new skills and knowledge associated with new technology	Opportunity to be informed of / have exposure to new technologies valued by the individual
Transportation	Learned how to exploit new opportunities through road access and new transport services	Information and guidance available on new opportunities which individuals can exploit
Health	Living in a healthier environment	Information sharing on healthy living and ways individuals can improve their local environment
SOCIAL ORGANISATION	*Examples from study data:*	*Examples derived from defined functioning list:*
Care of the Environment	Has good practical knowledge of local environment and of environmental regulations	Practical understanding of human impact on local environment Able to conform to regulations to control impact on local environment
Participation	Contributes to community construction projects	Not coerced into participation in community activities but through reasoned personal value judgement learned as life experience

Generic Dimensions of Valued Learning	Functioning	Capability – surmised from functioning
Representation	Active participant in community / school planning activities	Freedom to genuinely participate in decision-making processes
Rights and Exploitation	Comprehends basic rights sufficiently to know how to take action when necessary	Empowered to access citizenship information

Two aspects of freedom can be evaluated under this dimension of social learning. First is the extent to which the learning-related values embodied in social policy correspond to local perspectives on valued learning, as an indicator of the extent to which social change is internally or externally driven. Second, the associated impact on individual freedom relates to the extent to which individuals perceive their role as active agents of change or as passive recipients. These two types of freedom illustrate the inter-relationship between individual and social dimensions of development and the need "to give simultaneous recognition to the centrality of individual freedom and to the force of social influences on the extent and reach of individual freedom." (Sen, 1999, p. xii).

Social relations include aspects of social and interpersonal learning and development encountered within the family and outside the family in the wider community. Informant responses in the study illustrated the need to be sensitive to social context, highlighting issues which were differently realised in different social settings. Discipline, for example, is interpreted differently where the use of corporal punishment is considered an acceptable form of discipline in one society or an infringement of a child's rights in another. Socially accepted behaviour is influenced by social norms and individual response to the norm. This example also challenges the judgement of value where a universal norm of freedom and well-being is differently realised. The methodology is inclusive of all interpretation with the scope for particular cases to emerge from the evaluation methodology (Procedural Step 5). This corresponds with core principles of the capability approach as a framework for evaluation of individual well-being and influences of social policy.

Socially acceptable behaviour, as a dimension of valued learning, will include evaluation of negative as well as positive outcomes and diversity in the interpretation of this dimension across populations. For example child protection policies safeguard children in some societies against exploitation where they may be considered too young to be able to make an informed decision about certain behaviours such as drug abuse or safe sex. In this case a child's freedom is enhanced through the agency of child protection workers and other duty bearers. In other societies children do not have the same level of protection

and are therefore vulnerable to learning which adversely affects their capability and which becomes an "unfreedom", for example in cases where extreme forms of discipline, enforced on children, impact on socio-emotional learning. In this case the perpetrators of child exploitation are the agents of negative freedoms and capability deprivation. These examples serve to illustrate ways in which defined lists can be validated, applying Procedural Step 3 (contextualised), Procedural Step 4 (pragmatic lists) and Procedural Step 5 (all-inclusive).

Health education has led to direct improvement in people's lives, strongly influenced by informal learning from health workers, from school and from NFE classes all of which act as agents of change. The learning outcomes can be identified as improvement to individuals' lives. The learning pathway and agents of change can also be identified. In some cases a negative aspect of the same valued learning can be observed, based on an individual's position of ignorance and lack of exposure. Some informant groups indicated that some aspects of health knowledge continue to be taboo. This was illustrated for example by the responses of local teachers who act in loco parentis for girls' welfare at the village school, and who take responsibility for informal teaching of adolescent health messages. These topics are not imparted at home nor through the formal school curriculum. Several parents had been opposed to the teachers' interventions. The teachers were concerned that girls not attending school may face capability deprivation in this aspect of learning. A performance-based evaluation of school learning outcomes would not evaluate these aspects of capability. A relevance-based approach may evaluate this learning with the potential to compare the situations of attenders and non-attenders but would be unable to generalise across groups.

Change and development takes place over time and varies from one population to another depending on their stage of progress. A stage of development may be identified for each population. Viability of making direct comparison between populations that are at different stages of development may then be questioned. De-contextualised comparisons between populations are routinely made in performance-based evaluation of formal learning achievement, regardless of each population's stage of development. Examples of access to computer classes in rural Sri Lanka compared to lack of electricity and modern communications in rural Bhutan illustrate the need to apply Procedural Step 3 (sensitivity to context) in evaluation of conditions of equality (Lynch and Baker, 2005). In this interpretation, differences between populations in their stage of development and the varying influences of different social policy contexts can be analysed within the

evaluation process. The outcome would then be the evaluation of individual options set within the context of social policy conditions that enable equality of individual freedom.

Agency and Capability

The fourth dimension of agency and capability can be mapped onto each of the other three dimensions to the extent that every example of valued learning and individual capability enhancement or deprivation will be underpinned by the agency freedom of the individual to bring about the achievements she values. This requires evaluation of levels of empowerment, rights, decision-making, autonomy and self determination for the individual related to valued learning and capability (Table 6). Autonomy includes, for example, the potential each learner has to gain the skills, knowledge and personal attitude needed for independent living and for lifestyle choices, which is differently realised from one individual to another and across populations.

Table 6. Generic Dimension of Agency Freedom and Capability

Generic Dimensions of Valued Learning	Functioning	Capability – surmised from functioning
AGENCY FREEDOM	*Examples from study data*:	*Examples derived from defined functioning list:*
Empowerment	Confident in encouraging others to study and achieve, though uneducated	Able to find information and advice on ways to encourage learning in others, though illiterate
Decision-making	Uses rational judgement to choose one option or another eg study options for a child	Able to access information on choices and implications of one choice or another
Autonomy	Takes responsibility for her own learning	Free to make her own decisions about her learning pathway
Self-determination	Demonstrates that she has a clear idea of what she values and how she can pursue interests	Free to identify her own values and to realise some achievement in pursuit of interests

The dimension of agency learning is primarily intrinsic and positional and is determined by the influence of social arrangements on individual agency freedom. For example the extent to which individuals are free to make choices about their own learning is a function of the levels of delegation of responsibility and decision making accorded by social institutions. A child in one society may be considered to have more freedom or responsibility than a child growing up in another society. It may be argued that a universal threshold level of acceptable freedom or restraint can be defined which is a basic right of all children. However, evaluation of actual functioning and opportunity within the particular context is essential for an understanding of the extent to which the theoretical model of child rights is operationalised.

Parents and children described a number of situations, including legal disputes with neighbours and employers and access to learning for children with disabilities, in which they were exposed to exploitation where their explanations indicated a lack of information on rights and lack of social protection. Their lack of learning in these key aspects of agency and capability may be a function of social policy or of individual valued choice. Where this relates to entitlement, duty bearers have a responsibility to ensure capabilities of individuals are not restricted. In each case the individuals, both parents and children, could have benefited from learning which, once known and understood, could be valued as a means of improving life through agency and empowerment.

Informants from rural locations indicated a strong awareness of the importance of learning about management of the local environment on which the population were very dependent. Learning from local forestry and agriculture extension workers and school learning complemented the imposition of regulations that restricted what could be taken from the local forests contributing to the villagers' freedom to do and to be in terms of environmental sustainability. As a global issue with local implications this relates to public awareness and individual agency freedom. It exposes the complexity of measuring learning where factors are not discrete, where theoretical learning is less important than learning which is of practical relevance though not immediately beneficial to improvement of the individual's life. This dimension provides an example of valued learning related to improving future lives in which reasoning, underpinned by theory, affects knowledge and attitude. Informants from urban locations made no reference to learning about management of the local environment.

The general tendency was for those in the study who had less formal learning achievement and less exposure to information about learning options to have less voice through a combination of their own adaptive preference and through restricted opportunity from social institutions, both of which contributed to unfreedoms. This analysis of functioning and associated capability descriptors draws on Procedural Step 3 to provide a pragmatic interpretation of the nature of capability set within a social policy framework. The social context interfaces with the individual to influence the individual's valuation of learning and the individual's opportunity to improve her life through learning.

The dimension of agency freedom describes levels of political awareness and participation in civil society. It was observed among the informant groups of both adults

and children that, while all informants were encouraged to participate equally in discussions, there were some who were more articulate through self-selection, being naturally more confident and articulate regardless of level of formal education, and others who were more articulate because of leadership status accorded them by the group. The group leadership status was determined by group-determined criteria such as "worldliness" of those who were more widely travelled or seniority of members of the group. In other cultural contexts gender or ethnicity may be the learned behaviours observable in group participation and leadership roles. Such dimensions of learning related to social organisation of the group reflect cultural and social contexts of learning as well as personal characteristics of individuals.

CONCLUSIONS

The procedural approach applied to the organisation and analysis of qualitative study data provides four broad generic dimensions of valued learning to define lists of capabilities. The procedure, compared and contrasted with the procedures for performance-based and relevance-based evaluation methodologies, indicates that a capability-based approach can be used to expand the evaluation of learning outcome. The resulting lists of generic dimensions of capability can be compared with the lists which would apply to performance-based and relevance-based evaluation approaches. Furthermore the generic dimensions of learning expand the scope of the evaluation to measure impact of learning on the lives of individuals. The next chapter concludes the analysis by focusing on the influence of social policy on learning outcome and individual entitlement. A framework of indicators is sketched, to incorporate generic dimensions of learning outcome with diversity and plurality of individual learning opportunity.

Chapter 9. Development of an Improved Indicator Framework for the Evaluation of Learning Outcomes

INTRODUCTION

The capability approach, as an evaluation tool, incorporates a concern for social justice in the context of social arrangement and individual advantage. Evaluation of capability focuses on opportunity or freedom of each individual to improve the quality of her life through human agency and social opportunity. Human agency, as opportunity to develop, is influenced by the impacts of social organisation on expansion or deprivation of individual capability (UNESCO, 2004, p. 21). Questions relating to social policy may be asked, such as: "What aspects of social policy contribute to meeting the locally or externally determined needs of learners to enhance their capabilities?"; "What policies are in place that might hinder individual capability, for example not matched to locally valued learning outcomes?"; and "How can the influence of social policy on learning outcome and capability be evaluated?".

In this chapter the study findings are drawn together to map out broad indicators of learning outcome and capability considering both the individual and institutional social policy perspectives. First the range of performance-based, relevance-based and capability-based indicators of learning outcome is described. Then the ways in which each approach contributes to an evaluation of social policy commitment and individual entitlement is explored. Finally the points raised in the data analysis chapters are summarised to form the foundation of an improved indicator framework.

Any evaluation methodology used to measure learning outcome reflects and promotes particular norms and values while neglecting others, depending on whether the evaluation focuses on individual performance, relevance or capability. The dominance of a particular approach to evaluation of learning is itself a reflection of the influence of particular forms of social policy on the learner group. The evaluation approach also reflects the value accorded by policy makers to different learning outcomes. It is anticipated that expansion of the evaluation of learning outcomes to include evaluation of individual capability, in addition to performance and relevance, will provide insights into the ways in which social policy influences individual learning outcome. It may be possible to make a distinction between learning which is accorded a high or a low value by policy makers for a given population. This may be compared with the relative value accorded by learners relating to actual learning outcome as achieved functioning. The development of new indicators that

measure expansion of capability in this way can provide policy makers with a means of reviewing the influence of policy on learning and the relationship of learning to improved quality of life for individuals.

INDICATORS OF LEARNING OUTCOME

Performance-based indicators are already developed and widely referenced, for example the UNDP Human Development Index (UNDP, 1990), the performance measures of governments towards the achievement of Education for All (UNESCO, 1999a; UNESCO, 1999b; UNESCO, 2000b; UNESCO, 2000c; UNESCO, 2004) and country level performance measures of learning achievement in public examinations (Sri Lanka Department of Examinations, 2002; Sri Lanka Ministry of Education, 1998; Sri Lanka Ministry of Education, 2002). Evaluation is focused on learner performance within the formal education system and social policy definitions of what individuals need to learn.

Relevance-based indicators measure learning outcome by applying criteria appropriate to each localised context. Evaluation is focused on capturing the diversity of local situations, reflecting social policies which vary between populations in what is considered as valued learning and as valued capability. Relevance-based indicators, designed to measure the influence of social policy on learning outcome, focus on values within each community, on the assumption that there is a commonality of perspective within the community. Evaluation would, for example, accommodate indicators of local language learning, learning of indigenous skills and practices and practical application of learning such as life skills for independent living as well as academic achievement or lack of academic opportunity. Equality would be measured, in relevance-based evaluation, by the freedom each community had to pursue its own valued learning, without extending the measure to a normative comparison of each particular case with other populations.

The capability-based approach, as explained in the previous chapters, focuses more directly on indicators of social justice, equity, social protection and wellbeing. Indicators of the effectiveness of the national system to deliver on its commitments include general characteristics such as functionality, stage of development, resource capacity and distribution of resources to meet commitments. At this macro-level social commitment to improving the quality of life of individuals includes indicators of mechanisms that provide access to information for all parents and children which enhances the basic capability of each individual to make informed choices; mechanisms that positively enable participation of all parents and children in learning processes; recognition of

learning valued by particular populations in addition to the core curriculum of school learning; practical application of learning to daily life; and short, medium and long term tangible and less tangible benefits to the individual such as autonomy and self-esteem.

An indicator for the evaluation of learning outcome and capability could include comparison of short, medium and long term connections between education and individual well-being. Such indicators of social commitment to learning outcome and capability would provide more focused evidence of the impact of learning on improved quality of life for individuals than performance-based evaluation of long term national investment in human development. Informal learning outcomes are more diverse and generally focus on relevance and practical application of learning in the short or medium term. For social policy-makers, evaluation of the benefits of learning assumes a medium to long term view of outcomes as returns on investment whereas the pressures of day-to-day survival for individuals living in situations of poverty tend to focus their evaluation on short term needs and immediate benefits. An indicator for parents in situations of poverty, for example, is the financial and in-kind opportunity cost of school attendance, deciding between sending children to school for the potential future benefits they may gain, balanced against the reality of present and future labour needs on the land and in the home given the uncertainty of paid employment opportunities.

The four generic dimensions – functional learning, basic skills learning, social skills learning and agency freedom – defined in this study (Chapter 8), provide a framework for the development of capability-based indicators. Indicators of the social policy commitment towards **functional learning** may include analysis of: (a) provision of livelihood learning opportunity for different learner groups; (b) the match between learning opportunity and labour market needs; and (c) the extent to which learning for improved basic life skills and household management skills is prioritised and supported by a range of learning providers. Indicators of the social policy commitment towards **basic skills learning** may include the extent to which: (a) opportunity to progress to the next level in the system is merit-based or based on ability to pay; (b) provision is inclusive of all learners; and (c) the system promotes diversity or mono-cultural interpretations of literacy, numeracy and life skills. The social policy commitment towards **social skills learning** may be evaluated using an indicator which shows how social organisation and social relations influence awareness and understanding among individuals of their rights and their freedom to participate equally in civil society. The dimension of **agency freedom** includes analysis of the constraints and opportunities which arise from the influence of different social policy commitments, where learning

leads to different learning outcomes and capabilities (a) in a liberal social system compared to a conservative society, (b) for girls and boys, and (c) for children from different socio-economic backgrounds including differences in opportunity between urban and rural learners.

Indicators inform an understanding of how different social policy strategies influence learning outcome and basic capability through analysis of the ways in which social commitments are operationalised and evaluated under the three evaluation approaches. The three approaches provide different perspectives on learning outcome which serve different purposes: monitoring of global and national trends from performance-based evidence; evaluation of differentiated outcomes from relevance-based analysis; and capability as a measure of improvement to quality of life of the individual.

In the next section the study analysis is used to explore ways in which social policy commitment to learning outcome is evaluated through the three evaluation approaches. Analysis of the social policy commitments of service providers is followed by analysis of the individual entitlements of learners including the constraints to individual capability enhancement in the context of learning outcomes.

SOCIAL POLICY COMMITMENT AND EVALUATION OF LEARNING OUTCOME

Indicators of social policy commitment to learning outcome and capability need to be developed to respond to two key questions: 'What difference has educational opportunity really made to the lives of individuals?' and 'What has been the influence of social policy on valued learning outcomes and enhancement of basic capability?'

Performance-Based Evaluation and Social Commitment

Performance-based evaluation methodology tends to align with an approach to social policy in which clear distinctions are made between success and failure, where defined learning outcomes are valued and rewarded using a standard yardstick for all, where value is primarily instrumental, for example in gaining access to the next level up. Failure in this approach limits future opportunity. Measures of intrinsic and positional value are not explicitly included in performance-based evaluation of learning outcome but are implicit in individual perceptions of personal performance. Achievement outside particular learning domains and below prescribed pass marks is not captured.

In the performance-based approach, social policy is established to provide standardised solutions to problems. Evaluation is designed to measure the effectiveness of standardised solutions in resolving the identified problems. Embedded in a country's social policy are the actual state level commitments to education including actual commitment to delivery by service providers. This varies depending on the dominant values and underlying philosophy of the national system represented in social policy. In addition the characteristics of the education system, the quality of the component parts of the system, the stage of development and the capacity of the national system to deliver are all determined by the social policy which consequently influences the capability of individual learners. Typically, national education strategies and international monitoring systems contain no mechanisms for explicit evaluation of the influences of social policy on individual capability in either the formal or informal learning environments.

Performance-based indicators represent a particular perspective held by learning providers towards social justice, equity, social protection and wellbeing, reflected in social policy. Equality of learning opportunity may be measured in two ways through performance-based evaluation. Firstly the evaluation, based on a standardised measure of learning achievement such as grade level examinations, measures all children against a common standard. Secondly, inequalities are simplistically measured by counting those children who do or do not have access to the standard set of learning resources and facilities required for achievement of basic education.

The performance-based representation of social justice in the context of learning is captured in each government's commitment to Education For All. Achievement of EFA could, in performance-based terms, satisfy the condition of social justice by achieving 100 percent enrolment in basic education, for example. However, alternative indicators are needed to analyse the extent to which a country's national education policy enables the fulfilment of the duties and responsibilities of policy makers towards their EFA commitment against parameters of individual entitlement and conditions of inequality (Lynch and Baker, 2005; Tomasevski, 2006; Unterhalter and Brighouse, 2007).

The performance-based approach may not be able to identify social injustice inherent in a particular social policy mechanism, for example where there is disparity in the relevance and quality of learning which impacts on a child's future opportunity. Closely associated with social justice are issues of social protection in relation to learning. Performance-based indicators of learning outcome, for example, may measure the provision of life skills learning opportunity such as awareness raising on mother and child health practices

and acquisition of basic skills for financial security. However, evaluation is generally only a proxy for measurement of actual learning outcome which assumes an outcome of enhancement to basic capability in terms of avoidance of harm.

Relevance-Based Evaluation and Social Commitment

Social policy which draws on relevance-based evaluation methodology reflects a concern for more differentiated learning opportunity and learning outcome, including evaluation of formal and informal learning from local value perspectives. Standardised performance-based evaluation is challenged, for example, by the varied interpretations of learning competency. Within the rural community contexts and among parents and children with minimal levels of schooling in this study the social distribution of learning through cultural sharing was observable. Competencies and skills were learned through co-construction of meaning (relevance) within a range of variable social groupings rather than through cognitive transformation and aggregation of isolated individual competencies (performance).

Relevance-based evaluation is generally the domain of social anthropologists and ethnographers, rarely used by policy makers for the evaluation of learning outcome except as a supplement to performance-based evaluation. Relevance-based approaches are used in community-focused qualitative studies such as learning opportunities delivered through community development projects, through intergenerational transfer of knowledge and skills, and informal local learning opportunities arising from knowledgably skilled individuals such as religious leaders and local crafts-people. The metric of achievement would be defined from the local community or social group perspective and would vary from one group to another.

Serpell (1999, pp. 111-112) critiques human development discourse as too narrowly defined when schooling is aligned to growth in economic production. He argues that a differentiated spectrum of individual outcomes is the result of different contributions of different individuals linked to a fundamental notion of a 'multiple agenda of schooling' and 'pedagogical activity of cultivating individual development in socio-cultural context'. Indicators of individual development then draw on ecological, social and cultural values including child-rearing practices, and ethno-theory of child development and socialisation. In particular the distinctions between parenting and schooling become significant in this analysis when school learning is alien to the cultural assumptions of other child development practices and beliefs. A further concern is the institutionalisation

of learning where the compartmentalisation of human development into subjects and stages of schooling are taken as natural for the organisation of children's socialisation and development on a collective basis.

The logical progression of this rejection of standardisation is the alternative proposition of learning defined at local levels of relevance to the learner. A relevance-based methodology for evaluation of learning in rural contexts includes decentralised definitions of what constitutes valued learning outcome based on public criteria of success. Relevance-based evaluation of valued learning, by its nature and basic characteristic, is non-standardised and functions naturally within social policy that is decentralised and disaggregated, supporting efforts to value, and thereby sustain, cultural diversity.

In the relevance-based model social justice, equity, social protection and individual well-being are differently conceptualised within each population and the differences are reflected in the choice of indicators of valued learning. For example, the specific relevant basic life skills vary between the rural Sri Lanka population and the rural Bhutan population and between the rural and urban Sri Lanka sample. One population may prioritise evaluation of economic well-being and competition between individuals, rewarding learners on the basis of survival of the fittest within the system. Another population may prioritise happiness and moral integrity as the most valued learning outcomes.

The strengths of the relevance-based approach to evaluation are the recognition of diversity and the potential to describe different models of social policy for their particular influence on learning outcome and capability. A weakness with relevance-based evaluation is the limitation of recording local practices relevant to the present time and place, isolated from a broader context and isolated from a wider comparison against generalised criteria for evaluation of quality of life. The approach does not provide the scope to identify alternative ways in which situations could change and contribute to future improvement in the lives of individuals. Social policy which reflects a relevance-based approach to evaluation, for example a system that acknowledges and values indigenous learning and recognises the importance of locally relevant basic life skills, focuses on evaluation of learning outcome within that microcosm.

Capability-Based Evaluation and Social Commitment

Social policy that is committed to human development based on a perspective of individual capability moves the analysis beyond performance and relevance towards evaluation of enhancement of individual freedoms and improved quality of life. Social policy designed with a concern for individual capability would evaluate mechanisms and procedures for the extent to which they protect individuals from harm through enhancement of basic capabilities, particularly in the case of individuals who are most vulnerable and at risk. In the context of valued learning outcomes, evaluation would focus on future benefit of learning as foundational to enhancement of other basic capabilities in addition to the capability to be educated.

A capability-based social policy would reflect strategies and action plans that prioritise learning opportunity inclusive of the following critical areas of focus: gender equity and empowerment of girls and women (Nussbaum, 2000; Robeyns, 2003; Robeyns, 2004; Unterhalter, 2003); poverty eradication through livelihood skills learning and real opportunity to apply skills (Hoffman, 2006); good governance through equal participation in civil society (Roquette, 2004); and social tolerance through appreciation of diversity (Flores-Crespo, 2007; Gasper, 2002; Pierik and Robeyns, 2002; Sen, 1999). The principles behind such priorities towards capability are firstly the avoidance of harm and disadvantage where basic capabilities are lacking and secondly the achievement in aspects of learning that are foundational to the enhanced freedom and potential for the individual to achieve in future (Terzi, 2007).

A capability-based approach expands the evaluation parameters, providing scope to measure agency freedom as the extent to which an individual is enabled to exercise self-determination and autonomy in learning choices within her social policy context. It can also include evaluation of state commitment to equality of learning opportunity. Indicators of social commitment to learning and capability may focus on ways in which social policy influences public opinion and individual valuation of learning; ways in which social policy influences social mobilisers such as NGOs in relation to valued learning; and the limitations to the achievement of valued learning for some learner groups including barriers to participation and empowerment caused by particular social policies.

The capability-based approach adds a human development dimension to the evaluation of valued learning outcome by responding to questions of individual freedom to improve one's quality of life which is not measurable though performance-based or relevance-

based approaches. Another key aspect of capability-based evaluation is the potential to include multidimensional and cross-sectoral aspects of development. Policy makers can become more responsive to development of capabilities by selecting from a multidimensional range of learning outcomes, identifying those of direct positive or negative value to the future development of the individual.

SOCIAL POLICY COMMITMENT OF SERVICE PROVIDERS

The performance-based, relevance-based and capability-based approaches can be considered in the contexts of the social policy agendas of Sri Lanka and Bhutan at a range of levels representing a variety of formal and informal service providers and duty bearers including government, NGO's, development partners, local knowledgeably skilled people and family members.

Social Policy Commitments to Learning in Sri Lanka and Bhutan

Written into the constitutions of both Sri Lanka and Bhutan are the principles of free and equitable access to education which is then reflected in each country's national education policy. The education policies include specific objectives through which to achieve goals such as eradication of illiteracy and provision of basic education as a component of each country's poverty reduction strategy. Behind these universal statements of social policy are the state institutions responsible for delivery of services to meet the targets, the achievement of which is measured and reported through performance-based indicators. The choice of indicators is driven by performance-based global reporting requirements for monitoring of education achievement

Standardised indicators conceal elements of diversity within each system. Formal education in Sri Lanka is more mature than the formal school system in Bhutan and has a multi-tier system of national, non-government and government school education[9], with a mixture of secular, church-based and monastic learning. Bhutan has a relatively young system of formal education including government controlled primary and secondary schools and widely available community-initiated but nationally-driven non-formal education. There is an emerging private school sector in several urban areas of the country. In both countries national policy determines the language of instruction and the

[9] National schools in Sri Lanka are Ministry of Education controlled Type 1AB schools with classes from Grade 1-13 or 6-13 offering advanced level classes. Non-government schools are privately funded including international schools, estate schools and education institutes attached to Buddhist temples. State schools are under the control of the Provincial Education Offices and include all school types - 1AB, 1C, 2 and 3. National Committee on EFA. (1999), *The EFA 2000 Assessment: Country Reports - Sri Lanka* Colombo: Ministry of Education and Higher Education..

national curriculum is undifferentiated between learner groups, using the same benchmarks of performance across all schools and for all children.

Relevance-based approaches to social policy in Sri Lanka and Bhutan are observed mainly within informal learning opportunity, for example through local religious ceremony and ritual, local livelihoods learning opportunity, community cooperation and participation in decentralised planning, and sharing of life skills and knowledge for self-sufficiency and survival. The policy commitment to decentralisation in both countries provides potential for diversification of social policy to evaluate locally relevant learning outcomes. The policy of decentralisation is supported by processes of local capacity building and training. Differentiated and decentralised systems provide opportunity for local participation in decision making, increased empowerment and autonomy, for example in developing local formal and informal learning opportunities. This can result in variable standards of quality, though it is the responsibility of policy makers to fulfil the commitment to equal education opportunity by regulating and monitoring standards so that all learners are in this respect protected from harm. Implicit in relevance-based approaches to social policy and evaluation of learning is a concern to protect learners from harm such that learning is appropriate to the needs of learners. However the evaluation may be externally administered and based on assumptions about relevance to the group rather than to individuals.

In both countries there are inequalities in the characteristics of service provision between urban and more remote rural locations where challenges to service delivery generally result in lower quality provision in the more remote locations, where there is also less opportunity to convert formal learning into economic opportunity. Performance-based policy, focused on instrumental value and indicators of economic growth, seeks solutions to these inequalities such as increasing local access through school construction, conditional social welfare benefit such as payment of school fees, scholarship programmes and school feeding programmes, and teacher incentives. An indicator of social commitment towards the capability to be educated is reflected in the payment of additional incentives for teachers and learners located in rural locations, for example, as compensation to ensure the delivery of the national system of education. As resource-based solutions, none of these directly addresses development in terms of individual capability enhancement.

Capability-based aspects of Sri Lankan and Bhutanese social policy relate to the freedoms which arise from realisation of individual rights, to participation in civil society and to the

promotion of social justice. All children have the right to free basic education though there are conditions of inequality in access and provision of services, as have been described in the case studies, relating to individual endowment, individual disposition to learning and individual conversion factors.

Tomasevski (2006) provides a comprehensive commentary on the reality of free education for children in different country contexts across the world. Influences of macro-level financing arrangements and the operationalising of development aid are set alongside examples of conditionalities and influences of power where realities for poor populations may be as basic as chance according to where they live and whether they benefit from debt relief and access to education or not. The commentary emphasises the critical linkage between state commitment and individual entitlement, and the influence of social policy on capability to be educated. The collective failure to achieve free education for all is 'the avoidance of law, with its inherent symmetry between individual rights and corresponding governmental obligations'. Without any legal basis to a government's commitment to provision of education for all, such as inclusion of individual entitlement written into education law, individuals are powerless to claim their right to education as a basic capability. Furthermore there is no global quality control with the consequence that countries can achieve compliance to EFA commitments without delivering meaningful learning as enhancement of capability. Just as education is foundational to the enhancement of other basic capabilities, the rationale which underpins the right to free education is that education unlocks other rights when guaranteed, while its denial precludes the enjoyment of all human rights (Tomasevski, 2006, p. xxi).

Provision of education as a human right requires states to fulfil their obligations and commitments, which is a complex undertaking. In some cases, such as in Bhutan, there is a resource capacity gap with the hardest-to-reach children located in small, scattered rural communities. In other cases, such as in Sri Lanka, the resource gap is largely addressed, as indicated by high enrolment in basic education, but there is inequity in the distribution of and access to relevant quality learning opportunity. Gaps clearly exist between entitlement, commitment and delivery.

The Bhutanese constitution makes provision for basic education for all children without making it compulsory because of the lack of present capacity within the country to enforce school attendance for all children (Annex 17). As its commitment to education for all, the State endeavours to provide education according to its capacity to deliver, in principle safeguarding the right to education for all children under the Convention on the

Rights of the Child to which the Royal Government of Bhutan is a signatory (Royal Government of Bhutan, 2005). This illustrates the distinction between ideal and pragmatic levels of social policy commitment and response to individual entitlement, contextualising the intention and the realisation of capability enhancement particularly in meeting the needs of children in contexts of rural poverty.

Evaluation of state level commitment to learning opportunity can focus on analysis of three key issues: (i) characteristics of service provision, highlighting inequalities and conditions of inequality (Lynch and Baker, 2005); (ii) the balance between standardisation and measurement of diversity; and (iii) progress towards the fulfilment of national obligations and realisation of individual entitlement in the context of rights, social justice, social protection and equity.

INDIVIDUAL ENTITLEMENT AND EVALUATION OF LEARNING OUTCOME

State commitment to education has been discussed in terms of fulfilment of policies arising from global initiatives of the United Nations Convention on the Rights of the Child (CRC), the World Education Forum on the Dakar Framework for Action on EFA by 2015 and the Millennium Development Goal of access to universal basic education (UNESCO, 2000a; UNESCO, 2004; UNICEF, 1990). Behind statements of social policy commitment of duty bearers are the learners as the ultimate beneficiaries, whose actual learning outcomes provide the substantive evidence of development as individual freedom. Here the question focuses more directly on individual entitlement to outcomes of learning which enhance ones' basic capability to be educated and learning as foundational to the enhancement of other basic capabilities such as the capability to participate equally and to know and be able to exercise ones rights.

Social policy in the performance-based approach focuses on effectiveness of systems and in the relevance-based approach on effectiveness of community level functioning. In the capability-based approach evaluation focuses more directly on how learning and related social policy impacts on the individual's opportunity to improve her quality of life. Taking an example of rural training for farmers with low levels of learning from the study contexts, a performance-based perspective of individual entitlement would quantify the number of farmers who should be and who have been trained in a new technology, a relevance-based approach would measure how applicable the learning is to the farmers situation and a capability-based perspective would focus on the individual's freedom to be able to access learning she values, foundational to the enhancement of basic

capabilities.

Learning as an entitlement is generally associated with the outcomes of formal basic education, with the general consensus that literacy and numeracy skills are foundational to the learning needs of all children. The entitlement to learning that will improve the life of the individual is not neatly compartmentalised into the subject domains of school learning but is cross-sectoral, inclusive of a wider range of skills, knowledge and attitudinal outcomes. There are numerous examples from this study of individually valued life skills outcomes from informal learning, for example the benefit to a community of learning how to live together harmoniously through conflict resolution, the knowledge of how to improve crop yield and avoid exploitation in the marketplace, or the constraints of not having basic financial management skills or sufficient knowledge of employment and housing rights. Literacy and numeracy skills are applied across many different contexts in daily life. The entitlement extends beyond the performance-based learning of mathematical formulae or study of school textbooks which enables the individual to pass an exam. Similarly it extends beyond ensuring that the mathematics and reading materials are culturally, linguistically, and developmentally relevant to the individual. The entitlement to learning, from the capability perspective, considers the value to the individual of numeracy, literacy or other skills learned and the extent to which learning contributes to the enhancement of the individual's quality of life.

In response to social justice in individual entitlement to learning, a capability-focused social policy would prioritise learning opportunities for people who lack the basic capability to be educated, and who consequently also lack foundational learning that enhances other basic capabilities. Entitlement to learning opportunity could include indicators of parents' and learners' entitlement to participation in the learning process; parents' and learners' entitlement to access to information to be able to make informed choices including awareness of predicted short, medium and long term tangible and intangible benefits; parents' and learners' entitlement to recognition and inclusion in the evaluation of the learning outcomes which they value.

Social policy commitment towards learning and capability enhancement for vulnerable groups extends beyond formal school learning opportunity. The social commitment to education for all children is unmet where, for example, the capacity is lacking in rural service provision for inclusion of all children in formal learning. There is evidence in both countries that children with disabilities who are unable to access formal learning are provided with informal learning opportunity within the community and family, for

example. In such cases carers' skills and capabilities are variable and could be enhanced through learning opportunity, addressing some of the inequalities that affect this particular vulnerable group.

Constraints and opportunities to enhancement of basic capabilities through learning include indicators of: the extent to which learning expands or restricts a child's basic capability to improve the quality of her life, in particular the impacts of poverty; the actual impact of learning as one component of poverty alleviation; negative impacts of unregulated service provision; negative effects of harm caused by system-driven pressures exemplified by pass-fail learning outcomes; and unfulfilled entitlements to basic rights and freedoms, protection and justice. Several of these indicators of individual entitlement are discussed in the following sections with examples drawn from the study contexts.

Individual Opportunity for Participation in Learning

Social policy determines the extent to which individuals are encouraged or discouraged from participation in the learning process and the degree to which stakeholder groups such as parents or children are encouraged and enabled to participate in decision-making or excluded where an authoritarian stance is taken towards participation. The recognition of diverse cultures and values is important in this context since the purpose of implementing a capability-based approach is, in essence, to recognise pluralities and diversities within the evaluation framework. It is not proposed that a capability-based indicator framework seeks to describe a standardised formula for participation, neither for equal participation of all learners, but rather to identify conditions of inequality in opportunity to participate.

Opportunity for participation in learning varies even within the broadly stated entitlement to Education For All, with variation determined by a complex combination of social policy and individual disposition. A confident spokeswoman for a group of mothers in Sri Lanka, for example, who had not completed basic education herself, indicated that even without education she can participate in school and village meetings. In contrast, other unschooled mothers expressed concern that the school meetings do not invite participation but are used for making school announcements. In the classroom the teacher generally controls the level of participation of students whereas informal learning at the village workshop or in the vegetable garden invites active participation. Analysis of the influences of social policy and social norms within a population provides an indication of

the positional value of formal education and the way in which this impacts on participation and empowerment of individuals.

Among the study populations of Bhutan and Sri Lanka, uneducated parents indicated several barriers to participation in the formal learning experience of their children including not knowing what their children were learning at school. Informants who had not completed basic education repeatedly indicated that they considered that their state of illiteracy meant that they know nothing. This case of adaptive preference (Nussbaum, 2000, p. 114) in which people believe their situation is beyond their means to change, can be recognised and addressed through social policy whereby active participation is valued and encouraged. Policy makers are in a position to influence this through, for example, establishing participatory opportunities that are inclusive of marginalised groups including the poorest and least educated. Social policy influences individual participation and, reciprocally, individual characteristics determine the influence of social policy.

Access to Information

Policy mechanisms influence the extent to which individuals are able to exercise independence in decision-making as a means of personal empowerment, differentiated according to level of learning achievement and access to information. The data analysis provides evidence of a number of situations in which access to information was a factor that enhanced or restricted the capability of individuals by impacting on their range of informed choice. Where learners are either misinformed or uninformed about learning outcomes and capability their expectations may be falsely raised or, conversely, learning opportunities may be missed.

Indicators of inequality in access to information include personal constraints such as lack of literacy skills and differences in language between home, school and marketplace. The basic capability of uneducated villagers is restricted when differences between the languages of home, classroom and marketplace limits their access to information. The basic capability of school-going children is enhanced through learning the language of the classroom. Villagers who learn the language of the marketplace through travel and business similarly enhance their basic capability.

Social policy which addresses inequality in access to information includes awareness campaigns and initiatives of socially responsible individuals such as the village headman and local knowledgeably skilled people within the local community, strategies for

encouraging wider participation in school and community activities, adult literacy classes, inclusion of all stakeholders in processes of decision-making and individual freedom of access to information. The increasing accessibility of information through the internet is an example of enhancement of capability as individual freedom, also illustrating the foundational need for relevant literacy skills as a basic capability and issues of equity in access to services.

Lack of access to information is an identified capability deprivation linked to remoteness of location and to the vulnerabilities of parents and children with low levels of education. Informant groups indicated a considerable lack of access to information relating to actual learning opportunity and future benefits. Lack of access to information about learning opportunity places the individual at a disadvantage to others who are informed. More fundamentally, because information is a foundational element of learning, lack of information clearly constitutes harm to the individual where the basic need for education is not met. The State, as duty bearers for the provision of basic education, has a social responsibility to provide equitable access to information about learning opportunity. The individual learner has an entitlement to be informed and also a responsibility to inform herself. Parents and primary carers as duty bearers also have a responsibility to access and utilise information available to them, but individuals with limited education are disadvantaged in this respect.

CONSTRAINTS TO CAPABILITY ENHANCEMENT

Individual entitlement to education, formulated as equality of access to schools, teachers and learning resources, is a simplistic indicator of individual capability to be educated. Access to learning resources and services may be determined by merit in some cases, by balancing household opportunity constraints in other cases, and by variations on entry requirements and financial constraints between different learning systems. Limitations in accessing the next level up in a system restrict future capability. Capability deprivation also arises in situations where the learner, perhaps unknowingly or perhaps through no choice, is accessing resources and services which are basically dysfunctional. Capability deprivation is caused, not by choice or preference, but by social, economic and environmental constraints to school access. Each of these elements can be included in the formulation of an indicator of the influences of social policy on individual capability.

An evaluation of learning outcome should include analysis of negative as well as positive learning outcome. Unterhalter (2003) draws attention to vulnerabilities and negative

outcomes of school attendance for female students where circumstances expose them to sexual harassment and abuse. Other examples of capability deprivation associated with informal learning include child labour, training of child soldiers, children living in situations of violence and conflict, and black market activities of drug trafficking and child prostitution, identified as extreme examples of negative learning outcome. Such learning outcomes arise in situations where social policy and social protection is weak, affecting the most vulnerable groups, where learning choices are limited and where capability deprivation results in, and is a result of, lack of informed choice. Such negative learning outcomes are generally only valued by the most vulnerable in the absence of other choices, as a consequence of extreme coercion and exploitation. These extreme examples of vulnerability demonstrate the importance of expanding the framework to include evaluation of negative learning outcome and capability associated with factors such as informed choice and entitlement to social protection. The model is then realistic and inclusive of all children, not limited to those who are learning in a functioning school system.

Poverty is often associated with "*capability failure*", related for example to disempowerment and lack of opportunity for individuals to participate in decision-making processes (Alkire, 2002, p. 156). Access to formal education is cited, in performance-based terms, as a macro-level solution to poverty, as a means to improving individual capabilities and life opportunities (UNESCO, 2004, p. 40). The correlation between poverty indicators and learning outcome is based on several assumptions. First is the assumption that indicators of learning outcome equate with individual capability to improve ones quality of life. Application of a capability-based approach enables this assumption to be tested by analysing how learning opportunities and outcomes actually impact on capability and poverty reduction. Such evaluation would measure poverty as more than commodity and resource-based, considering the extent to which learning outcome is converted to improved well-being. The second assumption is that poor people and providers of formal education use the same criteria for the valuation of learning outcome. Verification of or adjustment to this second assumption requires policy makers to know the diversity in values that learners hold and to enable this knowledge to inform policy making and decision-making processes.

Parents and children in the study based their calculation of the benefits of education on subjective speculation about future opportunity based on information available to them. Some families benefited from government or NGO-funded welfare-based schemes which provided cash transfer that enabled children to attend school, while other families, also

with extreme financial constraints that affected children's access to school, did not meet the criteria to qualify for this entitlement, for example families living just outside a scheme's geographical catchment area or where an employer did not fulfil his obligations and the employee had no means of demanding her right to education for her children. These incentives to send children to school raise issues of dependency-generation through cash or in-kind transfer such as free school meals, contrasted with transformative practices (Devereux and Sabates-Wheeler, 2004) where communities and families are enabled to manage their own solutions to such problems as basic capability enhancement through agency freedom.

The Sri Lanka study provided a particular example of the influence of social policy on opportunity costs of learning and capability deprivation. The selection process for entry to the best schools and consequently to the best employment opportunities is highly competitive. Consequently there is immense pressure on even the poorest of families to try to provide their children with tuition opportunities. Private tuition is very widespread and consists of unregulated after-school tuition with attendant constraints and opportunities. It is an additional source of income for teachers, politically accepted and encouraged by the system (Little, 1999, p. 193). "The test (Grade 5 scholarship examination) has been transformed into a competitive examination, spawned a private tuition 'industry' and has become a stressful experience for young children who have lost the joys of childhood in the process. ..... there has been much debate over the negative aspects (of the exam) particularly the prevailing practice of sending children in Grades 2-5 to private tuition classes" (Sri Lanka National Education Commission, 2003, pp. 89-90). The chances of passing the scholarship exam at Grade 5 are small (only 8% of students who sat the 2003 examination achieved the district cut off score), the pressures are great and are felt by children both in the pre-examination period of intense study and in the post-examination period of disappointment for the majority - the financial and non-financial constraints outweigh the benefits for most children.

In addition, many children attend private computer classes paid for by parents who struggle to meet the costs. There is no quality control or monitoring of standards of the classes since there is no requirement for businesses of this kind to be registered or licensed. There is little likelihood that the classes will lead to enhanced local employment opportunities – in the Sri Lanka study there were no computers in the rural village and none in the rural Grade 1-11 school which the children attend. The children were exposed to 3 months of basic-level computer literacy - once weekly lessons with 3-4 children sharing one computer and no opportunity to practice between lessons or subsequent to the

3 month course. Local employers commented that, though the families had paid for the classes and the children had a certificate, their achievement was poor.

If there is no social protection or advice available, children and their parents in such cases are vulnerable to poor quality services and to financial exploitation. They may not be in a position to make a judgement of service quality, value for money and real long term benefit. The classes are time consuming taking children away from other options of playtime or contribution to household chores. Parents are genuinely pursuing opportunities which they value, believing them to be in the best interests of the child. Providers and regulators of learning opportunities have a social responsibility towards learners. Where social policy is weak and services unregulated, the negative impact is felt by children and their parents.

There is a clear distinction between anticipated and realised improvement in individual well-being as learning outcome, calculated in terms of constraints and opportunities for the individual to improve her life. People living in contexts of poverty, with characteristically low levels of education, are particularly vulnerable. The analysis of constraints and opportunities to the enhancement of basic capability through learning expands the framework by identifying indicators of individual advantage and disadvantage in relation to the basic capability to be educated and the avoidance of harm.

DEVELOPMENT OF AN EXPANDED INDICATOR FRAMEWORK

The defining of capability-based indicators complements and expands the performance-based and relevance-based indicators of learning outcome. Headline indicators (Burchardt, 2006, p. 20) capture the multi-dimensionality of learning outcomes providing scope for selecting priority indicators, such as elements of valued learning, poverty, social policy and service provision, to compare across or within groups of learners. The study findings provide some starting points for defining alternative indicators of learning outcome and capability. The alternative indicators need to account for the influence of social policy on learning outcomes and the opportunity for individual development, including effects of inequalities and diversity between populations. The social policy implications include state responsibility and fulfilment of commitments as well as individual entitlement to information from which to make informed choices, social protection and social justice, equity and regulation of services to ensure quality, and wellbeing including financial and other-than-financial security.

Four main elements are identified from the review of evaluation processes for inclusion in a capability-based indicator framework, providing a structure to guide policy makers.

First, the evaluation should review and describe the social policy commitment made by policy makers towards the particular population, including the characteristics of formal and informal learning environments provided. Social policy in this context is cross-sectoral implying that the review needs to consider literacy, numeracy and life skills learning which is operational in health, natural resources, technology, environment and sustainable development, for example, recognised by the local population as valued learning.

Second, the entitlement to learning opportunity should be evaluated against social policy commitment and realisable opportunity for individuals. This provides an indication of the range of learning opportunities from which learners could choose if they wish and the limitations of access, quality and relevance for more vulnerable populations.

Third, the evaluation should identify what the individual is able to do, as achieved functioning in the generic dimensions of functional learning, basic skills learning, social learning and agency freedom. What the individual is able to do at the present time is a result of having made earlier choices, of having pursued a particular learning pathway and of having achieved a level of functionality. Analysis of present achievements can include indications of how individuals were enabled or constrained from converting learning into improved quality of life. It can also include indications of ways in which learning is perceived as of instrumental, intrinsic or positional value to the individual.

Fourth, the contribution of learning to the process of individual development includes evaluation of the extent to which learning outcomes enhance or deprive the individual of future opportunity. This includes the two elements of individual capability (i) as future opportunity to be educated and (ii) as opportunity to learn as foundational to the enhancement of other basic capability.

Capability-based indicators can be identified from the foregoing discussion, based on the two broad headings of social policy commitment and individual entitlement. Each indicator includes a cluster of measures for evaluation of the improvement in quality of life for individuals.

Capability-Based Indicator 1. Social Policy Commitment

The indicator of social policy commitment to learning incorporates a particular focus on evaluation of the ways in which social policy influences individual learning outcome and capability. This broad indicator would include, within the cluster of measures of social policy commitment: the short, medium and long term benefits of learning; the negative and positive impacts of social policy on learning outcome for different learner groups; the ways in which issues of social justice are addressed including equity and conditions of inequality; and the actions which can be taken through policy change to counter negative and harmful learning outcomes. This would include tangible and less tangible benefits and opportunity costs, broader than economic opportunity costs. It would focus on the identification of benefits which most directly enhance basic capability for the most disadvantaged and vulnerable groups and would include learner and policy maker perceptions of opportunity and benefit. Distinctions can be made for example between the stage of development of different school systems, the resource capacity of each system of learning and issues of equity in distribution of resources to meet social policy commitments. The capability-based approach can then be used to provide a distinct, non-standardised means of evaluation and analysis of social policy mechanisms that deliver differentiated learning outcomes and levels of basic capability.

Capability-Based Indicator 2. Individual Entitlement

The broad indicator of individual entitlement to learning which is valued and which enhances individual capability is directly related to the indicator of social policy commitment. It enables the evaluation to focus on the actual impact of learning as the opportunity of each individual to improve her quality of life. Access to information and participation are two key areas of evaluation identified from the study which determine each individual's range of valued choice. The influence of social policy cannot be evaluated without considering the opportunity for participation by different stakeholder groups and the opportunity for conversion of learning to achieve valued outcomes.

Evaluation of the influences of social policy on learning outcome includes the extent to which social policy mechanisms provide the scope for recognition of diverse learning outcomes, valued by the particular population, in addition to the core curriculum. The evaluation needs also to analyse the opportunity for practical application of learning to everyday life, not only in terms of relevance but also in terms of the extent to which learning can be applied as a basic capability to improve the quality of life of the individual. This includes consideration of issues of equity and diversity in information

access for informed choices.

CONCLUSION

The capability-based indicators of social policy commitment and individual entitlement expands the measure beyond performance and relevance, focusing on ways in which social policy influences the basic capability of individuals to be educated and impacts on their opportunity to access learning that is foundational to other basic capabilities.

The capability-based approach to the evaluation of learning outcome provides scope to expand the indicator framework. A capability-based approach broadens the scope of what might be included in an evaluation of learning outcome, the parameters of which might be differently constructed for different learner groups and which will have as a primary focus the connection between formal and informal learning outcome and improved quality of life for each individual. The scope might include evaluation of: (i) the relationship between social policy and learning, and their impact on food security, financial security, family security, health and social protection for the most vulnerable as broad factors for poverty alleviation; (ii) the impacts of poverty on learning outcome and capability, including negative impacts such as unregulated service provision (pubic and private), harmful systems such as inflated examination pressures, and unfulfilled entitlement to basic rights, freedom from exploitation, protection from harm and social justice; and (iii) the extent to which a state commitment to Education For All is operationalised towards achieving equity in empowerment of all through fulfilment of individual entitlement to learning, particularly for the least empowered.

Chapter 10. Conclusions

INTRODUCTION

Education is acknowledged as a fundamental means through which individuals are enabled to improve their lives. The global initiative of Education for All has become a driving force in the development of international and national indicators for the evaluation of educational achievement. These indicators are used by policy makers and development partners as key components in the evaluation of human development. It has been argued in this study that the existing evaluation methodologies and indicators provide insufficient evidence of the extent to which learning improves individual lives through enhanced capability.

Rich qualitative data, drawn from individual perspectives of valued learning, has been used to explore ways in which to expand the scope of the existing evaluation methodologies. The study data shows the variation in description of learning outcomes of individual children when performance-based, relevance-based and capability-based approaches to evaluation are applied. A parallel observation linked social policy to evaluation methodology. Where the dominant focus of social policy is performance-based for example, then the likely emphasis of evaluation of learning outcome will also be performance-based. The study provides evidence of the comprehensive range of information which can be analysed when evaluation is broadened to incorporate individual performance, relevance and capability outcomes of learning. The complexity of the broader database and the qualitative nature of these broader, disaggregated and diverse sets of data provided particular methodological challenges. These ranged from defining the evaluative space to inclusion of individual perspectives and categorisation of responses into a manageable body of information. These challenges are discussed in the following section.

The capability approach, introduced in this study as a complementary evaluation methodology, raised a range of theoretical and methodological issues. The study presented an opportunity to test how the capability approach is operationalised when the theory is applied to empirical data. The last section of this study considers the difficulties which were encountered in working with the capability approach and the work which still needs to be done to operationalise the capability approach.

RESPONSE TO THE RESEARCH QUESTIONS

The conclusions of the three research questions addressed in this study are summarised below.

In response to the first question 'How can evaluation of learning outcome be expanded sufficiently to measure the impact of learning on the lives of individuals?', the study demonstrated that the evaluation of learning outcome can be expanded by drawing on a capability approach. The expanded evaluation framework takes account of local perspectives on the instrumental, intrinsic and positional value of learning to the lives of individuals. It includes the range of learning choice, learning opportunities which are not chosen and learning choices which lead to negative learning outcomes. The list of defined valued learning outcomes and capabilities can be applied to all children, the overarching variables being their present state of well-being, their own perspectives on valued learning outcomes and their future opportunity.

Two broad conclusions are raised in response to the second question 'What lessons can be learned from empirical data on local perspectives of valued learning outcome in contexts of rural poverty to inform an understanding of the influence of social policy on the basic capability of an individual to be educated and to improve her quality of life through learning?'. The first conclusion is that evaluation of the empirical data describes the diverse ways in which social policy impacts on individual outcomes. Unintended outcomes can be monitored and the evaluation can be inclusive of all learners, within and outside the formal system of education. A second conclusion is that linkages can be made between social policy and its influence on the learning outcomes of individuals, in particular the impact of social policy on the learning outcomes of the most vulnerable and disadvantaged groups. Inequalities of condition and inequality of opportunity can be analysed in addition to the already widely available information on inequality of outcome.

The third question, 'How can the capability approach contribute to the development of an improved indicator framework for the evaluation of learning outcome?' is answered in the next section through a critical review of the study.

Critical Review of Theory and Methodology

The theoretical basis of this study is a comparison of three methodologies for the evaluation of learning outcome - performance-based, relevance-based and capability-based. These methodologies have been depicted as discrete entities for the purpose of

characterisation and comparison. In practice the distinctions are not clear cut and the evaluation methodology may be customised to fit the purpose, drawing on a combination of characteristics from all three methodologies. This study indicates, both in the theoretical review of the methodologies (Chapters 2 and 3) and in the application of the methodologies (Chapters 5 to 9) that performance-based evaluation is widely and routinely used, that relevance-based evaluation is selectively used to study specific topics and that capability-based evaluation is at an early stage of development.

The capability-based methodology has the potential to provide policy makers with information complementary to the existing performance-based and relevance-based measures of learning outcome. For example, evaluation which focuses on the individual value perspectives of children and their parents may provide unforeseen information on formal and informal learning perceived as contributing to improved quality of life in the local context. Such an evaluation would also reveal factors that deprive individuals of learning opportunity. This is particularly relevant to the influence of social policy on learning outcomes for the most vulnerable groups of learners including the present EFA and MDG goals of meeting the learning needs of those hardest-to-reach, uneducated adults and out-of-school youth. The priority, in this case, would be the evaluation of learning opportunity for learners excluded from the formal system or those who are included in the formal system but who are least likely to succeed on performance-based measures of learning outcome. Policy makers may criticise this proposal as methodologically impractical in terms of defining what is to be evaluated and how diverse learning outcomes are to be measured.

Within practical limitations, a compromise is needed between the extremes of measuring performance-based learning outcomes, such as examination results at age-determined milestones of development, which excludes those learner groups prioritised above, and measurement of positive and negative learning outcomes as a continuous process of human development which is inclusive of all learners. One such compromise would be to measure significant changes in the lives of individuals, associated with learning outcome and basic capability of each individual to improve her quality of life. Learning outcomes would be validated by evidence of achievement to an accepted standard according to specified criteria, described in statements of skills and knowledge competency.

Processes of evaluation need to be developed to provide policy makers and development partners with a workable procedure for selecting indicators to measure individual learning outcomes and capability. Policy makers and duty bearers need to identify the basic

capabilities relevant to each particular learner group and the connections between learning outcome and improved quality of life. The evaluation process should enable the questions "What formal and informal learning can improve the lives of these individuals and what learning situations deprive individuals of capability to improve their lives?" to be answered from the local perspective in relation to social policy and human development. Policy makers can draw on local perspectives to identify alternative learning pathways accessible to individuals, how various learning outcomes are valued and how they contribute to improving the lives of individuals. The local perspective describes the relevance of learning for individual survival and avoidance of harm. The transformative nature of social policy and its influence on learning outcome can also be evaluated.

Capability-based evaluation strategies which could be utilised by policy makers include: (i) a review of the process of evaluation – who participates in the evaluation process as decision makers, the purpose of the evaluation, the choice of indicators and dimensions to be evaluated and participation in the process of data collection and analysis; (ii) a review of the correlation between policy makers' commitment and each individual's entitlement to learning opportunity; and (iii) evaluation of the influence of social policy on individual learning outcomes.

Several difficulties were identified in the methodology used in this study. First, proxy indicators are used to evaluate broad statements of learning outcome, such as individual freedom and improved quality of life. Such complex multidimensional concepts are unobservable and can not be evaluated directly. They can only be partially evaluated and are limited by the scope and perspective of the evaluation. Conversion of learning to enhanced capability and improved quality of life is not observable without investigating a range of social, environmental and personal factors. The evaluation may not be able to attribute specific causal factor(s) to an individual's capability in converting learning, though the learning outcome will be observable.

A second difficulty in the study methodology is that evaluation of an individual's learning opportunity theoretically covers all possible outcomes across the spectrum from 'no opportunity' to 'full opportunity' to learn a certain skill or item of knowledge. Full opportunity taken up by the learner is observable, as in the case of school learning and examination results, whether the outcomes are successful or unsuccessful. Less observable is the distinction between the learning outcomes of three people: one who had 'no opportunity' and two who had 'opportunity but it was not taken up'. For example it

may not be possible to distinguish between a person who did not have the opportunity to learn how to manage the household finances, one who did not pay attention to the lesson and one who did not apply the learning to improve her quality of life. Each have the same observable outcome unless investigated to a greater level of disaggregated detail.

The study identified specific areas of difficulty in operationalising the capability-based evaluation methodology: (i) the meaning of key concepts and terminology; (ii) the operational procedure to define lists of valued learning outcomes and capabilities; (iii) the use of indicators; (iv) the interpretation and validation of data; and (v) the weighting and ranking of informant responses.

Key concepts and terminology used in the capability approach have been contextualised using the empirical data in order to clarify meaning: individual freedom (Chapter 5); conversion factors (Chapter 6); valued learning outcome (Chapter 7), functioning and capability (Chapter 8). The difficulty remains in establishing common definitions and meaning to complex concepts used in the capability approach and in being able to apply common definitions to diverse cases. Further work is required to clarify the meaning of capability approach terminology in its practical application to the evaluation of learning outcomes.

The procedural approach, used in this study to define lists of learning outcomes and capabilities, cannot eliminate the danger of selection bias in the creation of a list of capabilities, either from participants in the process or from the process itself. Researcher bias can be minimised by using a modified application of the procedural approach in which local perspectives form the basis for defining the capability dimensions. Tensions may be caused by the influence of the dominant social organisation on the process of evaluation of learning outcome to the extent that the particular form of social policy will be reflected in the evaluation design. The problem of participant or process bias can be minimised through recognition of the need to scrutinise the level of neutrality or bias in the evaluation process.

One aim of the study was to identify an expanded indicator framework for the evaluation of learning outcomes. The capability approach emphasises the connection between social arrangement and individual advantage. The contrasting perspectives of social policy commitment and individual entitlement have been used in this study as the basis for developing an improved indicator framework of learning outcome. Rather than pre-specifying indicators, the framework provides the scope for policy makers to determine

the indicator specification, customised to match the evaluation purpose.

There are subtleties in the meaning and interpretation of concepts which remain to be clarified. Ambiguities and pluralities of meaning will need to be carefully analysed to avoid misrepresentation of perspectives, for example when interpreting responses from minimally educated informants who may struggle to articulate thoughts coherently. The value of learning can be interpreted in different ways. Learning which is of value to one learner my have no value to another learner. Assumptions have to be made by the evaluator or the informant about the connections between learning choices, their value to the individual and the expectation that the individual is able to convert learning into improvement in quality of life.

The difficulty of weighting or ranking is an unresolved methodological issue in the evaluation of capability because of its essentially qualitative nature. In this study ranking was not pursued since early attempts at cardinal ranking became an inefficient and non-productive use of limited time. The rationale underlying the decision to abandon ranking in this study was three-fold. First the informants, in their reporting of what "came to mind" in the focus group discussions as important and valued learning outcome, engaged in an informal process of prioritisation and ranking. Second, valued learning outcome, in the broad context it was being studied, is an on-going process, unlike the outcomes from an objectively focussed project with time-bound and targeted impacts. Thirdly, it is argued that the application of objective or cardinal ranking is not necessarily justified in the intentionally open-ended and participatory process of evaluating valued learning outcome designed to capture diversity and impact on individual capability. This rationale suggests that definition of the evaluative space determined by the purpose of the evaluation and by consideration of participant capability, became a more critical initial consideration in justifying the extent to which weighting, ranking and aggregating was undertaken.

In the process of formalising a capability-based approach to evaluation of learning outcomes the above rationale for neglecting weighting and ranking of responses may be challenged. The informal process of weighing and ranking used in this study could not be applied to large scale empirical studies where some form of quantification and aggregation becomes imperative. Improvement in quality of life for example requires aggregation of outcomes and comparison of change for each individual over time, or for comparison between learner groups at targeted points in time. Future research may be needed to determine the degree of compromise considered acceptable between the rich

descriptive information base of the social scientist and the mathematical modelling of the economist. The choice of methodologies ultimately rests on the purpose of the evaluation and the appropriateness of one methodology or another to the primary user-groups which, in this study, are education policy makers, development partners and learner groups.

The study raises several key questions for future research which must be addressed if the capability-based approach is to be developed into a practical evaluation methodology for implementation by policy makers. It can be argued that governments have the ultimate responsibility to achieve their social commitments towards education for the improvement in the quality of life as an entitlement of all citizens. This assumes that each government has the means and good intention for its fulfilment. It also assumes that the potential differences between individual, local and national values can be reconciled. As discussed in the study, the dominant values of a society naturally prevail unless concerted efforts are made, through social policy, to empower those who hold different values. Those who are the least empowered include uneducated adults, out-of-school youth, the poorest households and the hardest to reach populations. The study does not have the scope to address ways in which evaluation of capability can address issues of re-distribution of opportunity to these more vulnerable and least empowered individuals. Neither was the study able to explore the issue of utilising evaluation outcomes in ways that are responsive to local value perspectives. These topics may form the basis of future research.

Several barriers are created by institutional structures which impact on the scope of evaluation. As this study observed, one such barrier is the cross-sectoral nature of learning outside the boundaries of the classroom; another is the extent to which governments are able to take responsibility for the learning opportunities and entitlements of individuals who are outside the formal system; a third is the extent to which governments are able to regulate standards of learning provision in the informal learning sector; and fourth is the limitation of perspective when the evaluation process fails to make connections between learner outcomes and the influence of social policy on different learner groups. Each of these areas requires further study.

An alternative starting point for research into learning and basic capability could use identified valued freedoms as the ends towards which the learner should ideally be progressing, reflecting development as actual improvement in the quality of life of the individual. For example, within the rights-based perspective on human development are global principles of freedom such as freedom from exploitation, freedom of expression

and belief, freedom through equality of opportunity. The means to achieve these goals includes enhancement of the basic capability to be educated and learning which is foundational to the enhancement of other basic capabilities. In this case the capability-based evaluation framework is operationalised to evaluate learning outcome and capability as the means towards the achievement of specific freedoms. Research could, in this case, map the social policy commitment of the state against the individual entitlement of learners and the extent to which social policy is implemented for different learner groups. An evaluation outcome could be an index of learning opportunity listing dimensions of learning, individual freedom of access to each dimension of learning and inhibitors to learning in each dimension including inclusiveness of learning opportunity.

To summarise, this study focused on the need to measure human development as relative change, both positive and negative, in the lives of individuals as an outcome of learning. The study applied a definition of human development as individual freedom to learn and actual quality improvement to individual lives rather than solely as resource-based evaluation of goods and services delivered. The study enabled the strengths and weaknesses of performance-based, relevance-based and capability-based evaluation methodologies to be identified and compared.

Performance-based indicators show human development as relative improvement in the overall aggregated learning outcomes data. Relevance-based indicators focus on local value systems viewed in isolation from the wider context of valued learning and capability. However, human development measured by analysing each indicator in isolation disregards the interconnections between learning outcomes, concealing, for example, a situation where enhancement of one capability (school attendance) may result in the contraction or devaluing of other capabilities (learning a valued livelihood or life skill in the home). This interconnectivity relates to the broad and cross-cutting nature of formal and informal learning. It focuses on capability as an integral part of any human development undertaking whether in health, natural resources, sustainable development or any other human endeavour.

While many questions remain to be answered, this study has addressed some of the methodological issues of operationalising a capability-based approach. The study has shown that the capability-based approach can be used, alongside performance-based and relevance-based methodologies, to broaden the evaluation of learning outcomes. This provides a way to include rich qualitative description of diverse learning experiences and to accommodate the different value perspectives of various stakeholder groups.

Annex 1 Education Indicators : Sri Lanka

Performance-based evaluation of learning achievement reviewed in Chapter 2 included discussion of indicators and metrics applied at international, national, provincial, district and school level. The two sample locations in Sri Lanka and Bhutan were chosen based on national and district level proxy indicators of school performance and economic development (Annex 1 and 2). The data is not comparable between locations since equivalent data sets based on corresponding metrics were not available.

Education Indicators from three districts, Sri Lanka - 1995 and 1998

Two studies undertaken by the National Institute of Education in Sri Lanka, with UNICEF assistance[10], provided indicators to assist in the selection of the district to be used in the Sri Lanka study (Navaratna, 1995, p. 28; Navaratna, 1998). Three districts were identified as potentially suitable for this study located in the most economically disadvantaged parts of the country:

- Nuwara Eliya, Central Province
- Badulla (Bandarawela), Uva Province
- Ratnapura, Sabaragamuwa Province

The NIE/UNICEF data for the three districts is summarised below for the purpose of comparison.

Table 7. Comparison of three districts in Sri Lanka - 1995

	National	Nuwara Eliya	Badulla	Ratnapura
		High number of small schools (1-2 teachers) in all 3 districts		
Average repetition rate	7.7%	**13.2%**	11.1%	8.46%
Dropout rate	2.6%[11]	**1.6%**	1.2%	1.1%
Highest drop out	Yr 5	Yr 5	Yr 5	Yr 5
Mean value of test scores in literacy	61.8%	53.2%	**59.7%**	55.5%
Mean value of test scores in numeracy	45.1%	42.3%	**46.1%**	38.1%
Mean value of life skills[12] test scores	27.6%	26.9%	**27.6%**	24.1%

Source: (Navaratna, 1995, pp. 13, 28, 60, 64)

[10] The Sri Lanka studies are part of the UNICEF/UNESCO Monitoring Learning Achievement Project conducted in 20 countries linked to achievement of EFA goals.
[11] Distortion due to higher than average dropouts in the conflict affected areas of the north and east.
[12] Life Skills includes four categories, each with disaggregated data scores – Duties and Responsibilities, Science Skills, Environmental Skills and Health Skills.

The second study, conducted in 1998 (Navaratna), is a follow-up to the first, shifting the focus to Grade 3 students. In this report, data is disaggregated by province and district and by rural/urban categories, according to the Sri Lankan government criteria:

Urban	- schools within Municipalities
Semi-Urban	- schools within Urban Councils
Rural	- schools within Gramoda Mandalayas

The main findings clearly indicate lower performance of rural schools compared to urban schools, with performance in Nuwara Eliya below the rural average in all skill areas.

Table 8. Comparison of three districts in Sri Lanka - 1998

	Nation	Urban	Rural	Nuwara Eliya	Badulla	Ratnapura
Literacy						
Mean value of test scores in literacy	62.19	65.36	**59.05**	Urban 69% Rural **51%**	Urban 56% Rural **53%**	Urban 70% Rural **61%**
% students achieving mastery[13]	32%	37%	**28%**	Urban 44% Rural **18%**	Urban 24% Rural **14%**	Urban 41% Rural **29%**
Numeracy						
Mean value of test scores in numeracy	53.23	56.21%	**50.25%**	Urban 54% Rural **39%**	Urban 42% Rural **35%**	Urban 59% Rural **51%**
% students achieving mastery	22%	25%	**18%**	Urban 17% Rural **9%**	Urban 28% Rural **6%**	Urban 27% Rural **19%**
Life Skills						
Mean value of life skills[14] test scores	71.27	74.09%	**68.48%**	Urban 75% Rural **57%**	Urban 61% Rural **59%**	Urban 80% Rural **66%**
% students achieving mastery	51%	57%	**46%**	Urban 58% Rural **24%**	Urban 48% Rural **36%**	Urban 67% Rural **43%**

Source: (Navaratna, 1998, pp. 6, 8, 10, 38, 56, 60)

Six year provincial plans were prepared by each province for the period 1999-2004. Information and statistics from these planning documents are summarised below:

Central Province (Nuwara Eliya)

- Grade 1-5 students (1997) 51.61% male 48.39% female
  63.77% Sinhala medium
  36.28% Tamil medium

[13] Mastery = 80 to 100 marks

[14] Life Skills includes four categories, each with disaggregated data scores – Duties and Responsibilities, Science Skills, Environmental Skills and Health Skills.

- Most schools are type 2 and type 3[15]. Most type 2 and type 3 schools "*situated in non-congenial remote and difficult areas.*" without the necessary resources and opportunities for a good education.

  Nuwara Eliya district (1998) 69 Type 1AB and C schools
  451 Type 2 and 3 schools
- Shortage of teachers in the Tamil-medium schools in the plantation sector.
- Trend in recent years to send children to urban schools resulting in closure of some rural schools.
- NER for Sinhala children is 95.3% and for Tamil children 93% - non-participation in education is a problem.
- Achievement levels in Grades 1-5 are not favourable. Pre-school provision is not up to standard. Competencies of teachers and status of buildings are not satisfactory.
- Many schools do not have library facilities and co-curricular activities are not available.
- Pre-school child health is deteriorating and school medical programmes are not sufficient – primary school achievement is affected.

<u>Uva Province</u> (Badulla)

- Badulla district – tea plantation area / a school for every 5.1 sq. km.
- Primary pupils in 1997 51.29% male 48.7% female
  80.3% Sinhala medium
  19.7% Tamil medium
  Sinhala school dropout 1.89%
  Tamil school dropout 5.95%
- Especially in remote areas, physical facilities are inadequate, buildings and furniture are dilapidated, curriculum materials, teaching aids and facilities for special education are scarce.
- 36.68% of teachers are untrained.
- Principals, Sectional Heads, Teacher Advisers and Supervisory Officers need training in school management.

<u>Sabragamuwa Province</u> (Ratnapura)

- Major crops are tea, rubber and paddy plus gem industry.
- Primary pupils in 1997 51.37% boys 48.63% girls
  86.8% Sinhala medium

[15] Schools not including upper secondary grades

13.2% Tamil medium

Sinhala school dropout 1.55%

Tamil school dropout 4.12%

- Generally lower standard of education in rural schools than in urban schools.
- In rural schools
  - physical facilities not satisfactory
  - limited availability of furniture
  - school management unsatisfactory
  - lack of teachers quarters
  - insufficient monitoring, supervision and guidance
  - many primary teachers in rural schools work in isolation

Nuweri Eliya and Badulla districts are predominantly tea plantation areas[16]. One district in Ratnapura was the target of a social development project in education in 2003-04[17] which could affect the research findings of this study. Badulla and neighbouring Monaregella districts were the recipients of donor initiatives for rural infrastructure development including education[18], though not entirely successful, acceptable or beneficial to the community. A predominantly rural district in Nuweri Eliya is singled out as having not received any project support targeted at similar disadvantaged rural communities. This provides one particular example of an extreme case sample, relatively unaffected by external agendas and is selected as the target location for the Sri Lanka study.

Education Indicators : School Dropout Rates, Sri Lanka

Statistics given as dropout figures from the Ministry of Education and Higher Education (MEHE) are shown below. The statistics are the most accurate available but they include those returning to school, those migrating in or out from other districts and out of age children. The figures are therefore not an accurate reflection of actual dropout rates. The patterns shows that Nuwara Eliya figures are proportionately lower against provincial figures than for either Badulla or Ratnapura. This is probably a reflection of the predominantly rural nature of Nuwara Eliya. Kandy, the urban centre of Central Province has a much higher proportion of non-attenders. In rural areas there are very few job prospects which may discourage school dropouts.

[16] A detailed historical, social and economic description of the tea plantations and education provision is given in Labouring to Learn Little, A. (1999), *Labouring to Learn: Towards a Political Economy of Plantations, People and Education in Sri Lanka*. London: MacMillan Press.
[17] Primary Mathematics Project, Community Partnership Programme.
[18] Integrated Rural Development Project – one school development project was not completed due to lack of local community interest and participation.

Table 9. Dropouts by gender, medium of instruction and school grade 6 to 9 igovernment schools (2002)

	Sinhala medium			Tamil medium		
Grade 6	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Central Prov	**251**	**95**	**346**	**462**	**311**	**773**
Nuwara Eliya	**43**	**14**	**57**	**320**	**249**	**569**
Uva Prov.	**331**	**157**	**488**	**236**	**193**	**429**
Badulla	**201**	**98**	**299**	**202**	**171**	**373**
Sabaragamuwa	**467**	**237**	**704**	**151**	**111**	**262**
Ratnapura	**323**	**146**	**469**	**114**	**66**	**180**
Sri Lanka	**3135**	**1388**	**4523**	**2258**	**1857**	**4115**
Grade 9						
Central Prov	**611**	**311**	**922**	**723**	**587**	**1310**
Nuwara Eliya	**106**	**49**	**155**	**421**	**347**	**768**
Uva Prov.	**598**	**403**	**1001**	**179**	**217**	**396**
Badulla	**339**	**248**	**587**	**155**	**179**	**334**
Sabaragamuwa	**677**	**370**	**1047**	**203**	**111**	**314**
Ratnapura	**458**	**264**	**722**	**111**	**90**	**201**
Sri Lanka	**5908**	**4086**	**9994**	**3449**	**3175**	**6624**

Note: highlighted cells indicate Sri Lanka sample population data

According to the Central Bank data sources, in 1981 the literacy rate in Sri Lanka was estimated as 88.6 percent. The male literacy rate was 91 percent and the female literacy rate was 83 percent. By 1994 this had increased up to 90 percent. A noteworthy improvement, nevertheless, is the improvement of the gender parity from 63 percent to 96 percent during the 50 years of independence. As regards the outcomes of this pervasive commitment to improve education one may note several relevant indicators: an Education Index of 0.83 and a Human Development Index of 0.704, (UNDP, 1990), a Life Expectancy of 72.2 years, an Infant Mortality rate of 17, a Birth Rate of 1.8 and a Total Fertility Rate of 2.2. During 1990s, however, a significant decline in the school age population occurred, mainly as a result of continuous decline in the birth rates. This led to a shift in the emphasis from quantitative expansion (except at the upper, secondary and tertiary levels) to quality improvement in the education sector.

(UNESCO, 1999b)

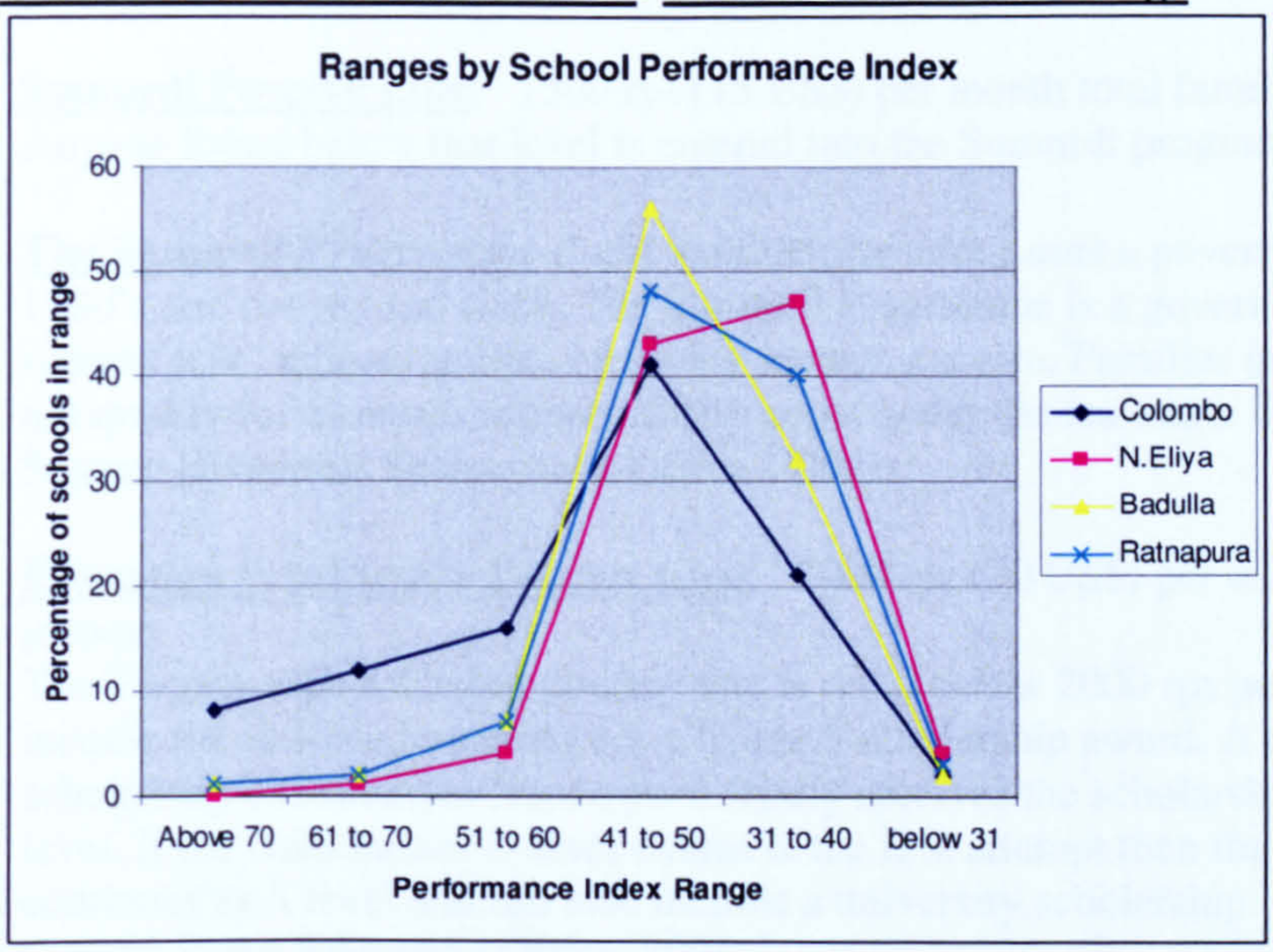
GCE O level Examination 2002 : Low Performing Districts – Nuwara Eliya

Percentage of Passes (A+B+C+S) of school candidates

District	**Subject**	**Percentage of passes**	**District position from bottom**
Nuwara Eliya	Mathematics	27.21%	Lowest
	Science and Technology	35.80%	2nd lowest
	Social Studies and History	68.52%	4th lowest

Source: (Sri Lanka Department of Examinations, 2002, Table 7)

GCE O level Examination 2002 : Performance Index Range



Source: (Sri Lanka Department of Examinations, 2002, Table 11)

Disagregation of University Entrance by Districts

(E) (i) In the case of courses of study other than Arts, up to 40% of the available places will be filled in order of marks compiled on an all-island merit basis.

(ii) 55% of the available places in each course of study will be allocated to the 25 administrative districts proportionately, based on the ratio of the population of each district to the total population of the country

(iii) 5% of the available places in each course of study will be allocated to the undermentioned 13 educationally disadvantaged districts proportionately, based on the ratio of the population of each district to the total population of the 13 districts.

(Sri Lanka University Grants Commission, 1997/98 Annex 1. Admission Policy E(i))

Note: Nuwara Eliya and Badulla are included in the 13 districts referenced above.

In 8 of the 26 disciplines there were no qualified students from Nuwara Eliya in 1997/98. Medicine discipline takes students with the highest marks. In 1997/98 the minimum marks for selection in medicine and agriculture respectively were as follows:

Colombo	280	252
Nuwara Eliya	222	209
Badulla	255	228
Ratnapura	258	243

Poverty Line

Sumurdi Poverty Line: 1500 rps (15 US$) per month total family income
Anyone living below that level is entered into the Sumurdi programme.

The Sumurdi Programme (local welfare provision) uses a poverty line set in the 1980's and not revised since. The Sumurdi Programme is a government programme to support low income families by giving money and rice. Families in the tea estates may not qualify for Sumurdi support if they come under the tea estate Benevolent Fund.
Source: Divisional Secretariat's Office, 2004

Education Scholarship Poverty Line: 2000 rps (20 US$) per month total family income
The Education Scholarship poverty line is set at below 2000 rps per month total family income for children to qualify for a Grade 5 scholarship award. A child who passes the scholarship examination from a poor family receives the scholarship support up to O level. If the child passes O level exams at the first attempt then the scholarship continues to A level and can also include a university scholarship.
Source: Zonal Education Office, 2004

Table 10. The percentage of families living below the poverty line by District

Using an average of 5 members in each family, the following statistics were available for 2004 showing in the locations studied:

	Total no. of families	Total families provided with Samurdi aid	% families given Samurdi aid
Walapane Zone.	30858	13782	44.7%
Harasbada N.	358	156	43.6%
Harasbada S.	109	58	53.2%
Ragala GN Div	9612	2024	21.1%
Ratnayake Patana	652	152	23.3%

Source: (Divisional Secretariat, 2004)

Table 11. Household Population Housing Survey 2001.

	% urban	**% rural**	**% estate**	**% of district population**
Nuwara Eliya district	**6.15**	**40.55**	**53.3**	**100%**
Walapane	**-**	**64.15**	**35.85**	**15.26%**
Badulla district	**6.84**	**72.8**	**20.35**	**100%**
Mahayanganaya	**-**	**100**	**-**	**8.63%**

Source: (Department of Census and Housing, 2003b)

Table 12. Percentage of households in occupied housing units by principal type of lighting and cooking fuel

	Nuwara Eliya	Badulla
Kerosene	**44.6%**	**39.6%**
Electricity	**53.6%**	**57.9%**
Solar	**0.2%**	**0.7%**
Not stated	**1.6%**	**1.8%**
Firewood	**88.8%**	**92%**
Gas	**5.9%**	**5.4%**
Kerosene	**2.4%**	**0.5%**
Electricity	**0.9%**	**0.2%**
Sawdust/Husks	**-**	**0.1%**

Source: (Department of Census and Housing, 2003a; Department of Census and Housing, 2003b)

Annex 2 Education Indicators : Bhutan

Table 13. Rural/Urban, National and District Comparisons

		Bhutan		Poor		Non-Poor	
		Boys	**Girls**	**Boys**	**Girls**	**Boys**	**Girls**
Net Enrolment Rate 6-12 age group	Rural	70%	62%	60%	55%	78%	68%
	Urban	89%	85%	78%	80%	90%	86%

	Bhutan			Poor		Non-Poor	
	Total	**Rural**	**Urban**	**Rural**	**Urban**	**Rural**	**Urban**
Net Enrolment Rate 6-12 age group	70.2%	65.3%	88.9%	56.9%	79.7%	71.3%	89.5%
Net Enrolment Rate 13-19 age group	52.2%	46.3%	77.3%	39.2%	77%	51.2%	77.3%

Source: (UNESCO, 1999a)

	National
Dropout rate	
Grade IV	5.18%
Grade VII	8.97%
Grade X	30.63%[19]
Student Survival Rate	
- to Grade VI	78.8%
- to Grade VIII	67.1%
Girls enrolment in Primary Education	45%
Female ratio in Non-Formal Ed	> 70%
Primary School completion rate, 1997	58%
Percentage pass Grade VI exam, 2004	86.89% (imputed)

	1989	1997	1998		
			Total	Urban	Rural
Mean score Gr.VI English	40.23	51.54	41.66	44.57	36.98
Mean score Gr.VI Dzongkha	55.13	44.94	40.47	37.84	46.48
Mean score Gr.VI Mathematics	40.63	39.34	38.14	16.99	19.28
Mean score Gr.VI Science	47.40	50.22	50.98	25.84	25.25

Source: (Royal Government of Bhutan, 2004)

	National	Wangdiphodrang	Trongsa	Paro
Primary School repetition rate 2004	10.46%	10.8%	13.1%	10%

Source: (Royal Government of Bhutan National Statistical Bureau, 2004)

[19] Completion of Basic Education

Bhutan - Poverty Indicators

From the qualitative surveys conducted across the country of individuals, respondents who considered themselves poor and the recent study on urban poverty, one or more of the following main reasons were prominent:

- Lack or inadequate size of land holdings;
- Inability to own a decent house;
- Vulnerability to food shortage; and
- Lack of sufficient resources to send children to school.

Of these, the lack of sufficient resources to send children to school is a relatively new factor for some families to call themselves poor. To the extent that the education of children is both a cause and consequence of wealth, it is not surprising that the inability to educate children is considered a distinguishing feature of the poor. Bhutan recognizes the multi-dimensionality of poverty. There are diverse indigenous notions of relative poverty in the country. However, landlessness and limited rural access emerge as the more pronounced causes of poverty.

Source: (Royal Government of Bhutan Department of Planning, 2002b)

Bhutan: Computation of a National Poverty Line, and Derived Poverty and Inequality Indicators

- *The national poverty line, which represents the amount that a person should consume (in real terms) to be considered as non-poor, has been established at 740.36 Nu per month.*
- *Based on this poverty line, it is estimated that 31.7 percent of the population of the country is poor. Of this, only 4.2 percent of the urban population is poor, against 38.3 percent of the rural population.*
- *Inequalities are relatively high, with the richest 20 percent of the population consuming almost eight times more than the poorest 20 percent (Gini coefficient of 0.416)*

Source: (Royal Government of Bhutan National Statistical Bureau, 2004)

An informal poverty metric given in the Sri Lanka study identified five basic items which a family needs: - Bed - cooking pots and utensils - cooking appliance - cupboard - sewing machine (home stitched clothes)	In Bhutan a similar list of basic household items was identified during the study which could be used as **an informal poverty metric**: - bedding - weaving loom (home woven clothes) - plough and oxen - transport (in the past and continuing today: self-portering, horse/yak, and today a tractor for a few farmers) plus baskets (locally woven from bamboo) and ropes (locally made from yak hair) - cooking pot and utensils (local blacksmith uses old pots to re-cycle into pots and utensils)

Notes on Standard of Living / Poverty Indicators from Bhutan Research Data

Some houses had solar power either purchased privately or purchased through an NGO scheme in which the family could repay over 5 years. In one village no-one has solar power. 18000Nu (£300) for solar unit – repay over 5 yrs – subsidised by RSPN. Trade price is 40000Nu.

Some families have power tiller / tractor, others have to hire or repay with labour. One village has no power tillers. A neighbouring village has 40 power tillers and tractors.

Tractor used for carrying potatoes to the road point and for ploughing.

People of Phobjikha are developing because of potato cash crop.

Tools as a sign of wealth and livelihood opportunity

- Solar lighting
- CGI roof
- Tractor / power tiller – or Ox and plough
- Weaving loom
- Cattle (milk)
- Sheep or yak (wool)

Bartar system in rural Bhutan

In Bhutan a barter system still functions among rural communities. For example: the Pow (local lay-monk who performs puja for health problems and annual house blessing, etc and father of one of the boys attending community primary school 2) pays labourers for their work during potato harvest by performing their pujas free of charge

Other examples of barter:

- Potatoes auctioned to purchase rice, oil, salt and cloth
- Potato labour exchanged for reciting of puja prayers and rituals
- Yak herding exchanged for a young yak
- Rice harvesting labour payment in rice

Community Labour and Village Fund

- Villagers contribute labour to construction of roads, health units, community schools
- Village fund contribution each month is used to provide low interest loans to people in times of need

Savings:

After selling the potatoes all the money is used to purchase rice and all the goods needed for the house for the coming year. "*The family has to go through this hardship each year to put the children through school. They will reap the benefits later*" (Group IV) People purchase rice, flour (atta/maida), tea and clothes.

Parents who send their children to school perceive that the children will be able to provide financial benefit to the family in future. People who have completed their education have difficulty in returning to the village because of the cost – they are expected to provide financially for the family even if they cannot really afford to pay. There is some considerable reluctance to return home.

Community fund of 100 Nu (£1) per month is collected from villagers and then if there is an emergency they can take a loan with low interest.

Table 14. Reasons for Not Attending School in Bhutan

	All children			Children from poor families		
	Urban	Rural	Total	Urban	Rural	Total
Not interested	7.28	9.06	8.94	16.28	7.51	7.6
Cannot afford	50.02	26.07	27.77	39.23	26.14	26.28
Need to work	3.72	18.61	17.55	1.24	17.98	17.81
Did not qualify	5.61	5.85	5.83	9.24	5.8	5.84
School is too far	3.37	7.34	7.06	0	8.31	8.23
Illness	5.32	2.39	2.6	7.67	2.52	2.57
Too young / old	3.54	4.61	4.53	1.57	5.51	5.47
Problems at home	10.51	9.37	9.45	8.04	9.94	9.92
Caring for sick relative	0	0.44	0.41	0	0.23	0.23
Other	10.63	16.25	15.85	16.73	16.05	16.06

Source:(Royal Government of Bhutan National Statistical Bureau, 2004)

Table 15. Education Attainment of Urban and Rural Adult Populations by Poverty Status – Bhutan (adults aged > 25 years old)

Education Level	Urban		Rural		Bhutan
	Poor	Non-poor	Poor	Non-poor	
No schooling	74.72	48.49	94.39	88.97	83.49
Primary	18.14	14.89	5.1	6.52	7.62
Lower Secondary	4.44	9.04	0.3	1.65	2.55
Middle Secondary	2.34	15.6	0.15	2.06	3.84
Higher Secondary	0	6.06	0.06	0.64	1.4
College and above	0.36	5.92	0	0.17	1.11

Source:(Royal Government of Bhutan National Statistical Bureau, 2004)

Table 16. Comparison of three districts in Bhutan

	National	Thimphu	Rural	Wangdue Phodrang	Trongsa	Paro
Total households				3264	1703	2847
Immunisation coverage				96%	-	90%
No. of Junior High Schools				4	2	4
No. of ch. in school				6107	3152	7600
No. of T. in school				167 (ratio 37:1)	100 (ratio 32:1)	244 (ratio 32:1)
% of district budget for Education	3.7%			42%	28.6%	49%

Source: (Royal Government of Bhutan Department of Planning, 2002a)

Five year plans were prepared by each district, the ninth Five Year Plan covering the period 2002-2007. Information and statistics from these planning documents are summarised below for Wangdue Phodrang Dzongkhag:

WANGDUE PHODRANG DISTRICT 9th FYP

Objectives

The development objectives to be pursued by the Dzongkhag during the Ninth Plan are to:

- Improve the quality of life and well being of the population
- Strengthen and enhance local governance and decision-making mechanism and institutions for sustainable development
- Enhance rural incomes
- Pursue a balanced and equitable development of all gewogs
- Preserve and Promote the rich cultural heritage and environment

Strategies

The above Dzongkhag objectives will be achieved through the following strategies:

- Improvement of the quality of life of the people through improvements in the quality of health and education services, promotion of income generating schemes, provision of rural electricity, etc
- Institutional strengthening of DYT and GYTs to enable these institutions to effectively take up the authority and shoulder responsibilities enshrined in the 2002 Chathrims
- Preservation of cultural heritage sites through timely maintenance and rehabilitation
- Conservation of environment and natural resource base through awareness campaigns and adoption of sustainable utilization mechanisms
- Enhancing rural access through the construction of farm roads wherever feasible
- Promotion of commercial farming in livestock and dairy development in the identified potential areas
- Increase agricultural and horticultural crops through mechanization and enhancement of processing schemes and access to market both within and outside the country
- Increasing the options to adopt appropriate technologies for rural development through the extension services and mass media like radio communication.

Source: (Royal Government of Bhutan Department of Planning, 2002c)

Annex 3 Summary Analysis of Performance-Based Indicators – Sri Lanka and Bhutan

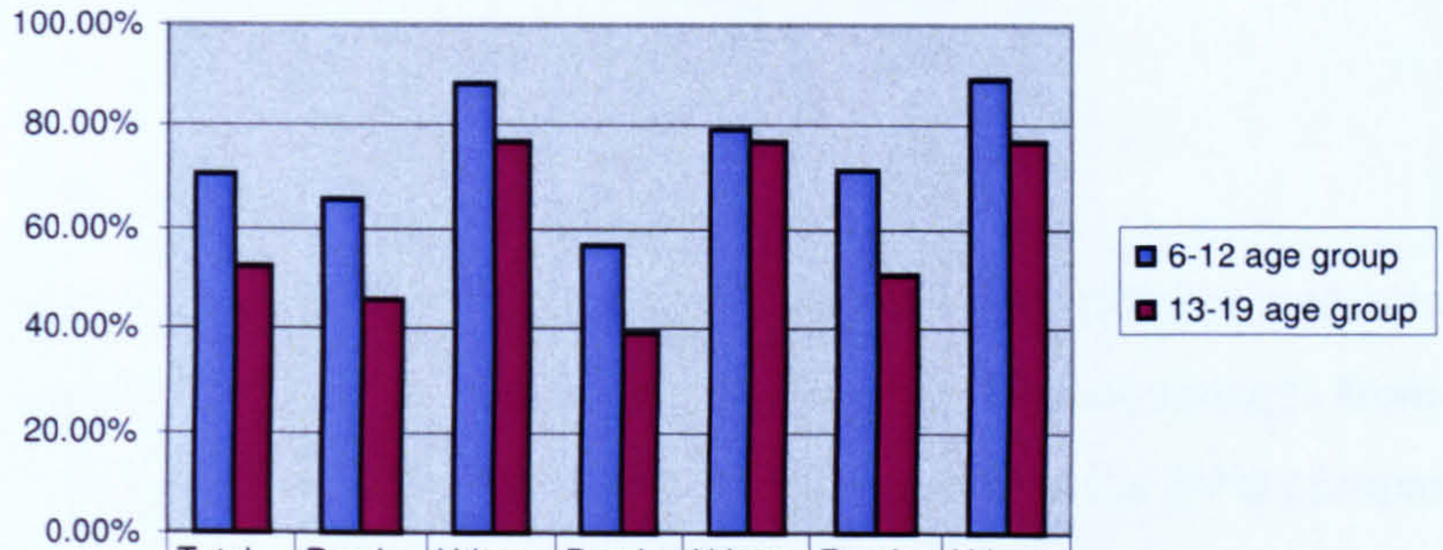
In Sri Lanka the data which most closely corresponded to actual achieved learning reported at national, provincial and district levels was survey data from literacy, numeracy and life skills learning achievement for Grade 3 and 5 children (Navaratna, 1995; Navaratna, 1998) and aggregate performance in O level examination results for core subjects (Sri Lanka Department of Examinations, 2002). The evaluation of numeracy literacy and life skills showed that mean performance scores in assessment tests were below the national mean for the sample district and were also below the national rural average scores in all skill areas. Life skills in these studies covered four categories: Duties and Responsibilities, Science Skills, Environmental Skills and Health Skills. The studies were part of an international assessment process driven by UNICEF and UNESCO, the Monitoring Learning Achievement Project. The project was designed as a standardised performance-based evaluation of children's learning achievement in the formal school system, to assist countries to assess and monitor performance in basic skill areas corresponding to the Education for All Goal 6: " ... *recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills*" (UNESCO, 2004, p. 28).

Data from the six year provincial plan documents (Sri Lanka Ministry of Education, 1998) provides indicators of system level school achievement and economic development. The plans include data on gender parity, ethnic mix and qualitative descriptors of constraints to delivery of quality basic education such as shortage of teachers in the rural Tamil-medium tea estate schools and categorisation of most schools as "*situated in non-congenial remote and difficult areas*. The gender parity statistic for the sample district in 1997 was 51.61percent boys to 48.39 percent girls enrolled in Grade 1 to 5. Decline in pre-school health and delivery of school medical programmes is reported in the sample province as affecting primary school achievement. No detail is provided. These performance indicators are proxies of achievement of learning within the formal education system and based on the values of the dominant model.

The Bhutan data, (Annex 2), presents a similar picture for performance-based evaluation of education and development. Economic indicators show that 94.39 percent of the rural poor aged over 25 years old had no schooling and that the main reasons for non-attendance for rural poor school-aged children are "cannot afford" for 26.14 percent of the sample and "need to work" for 17.98 percent of the sample. (Royal Government of Bhutan National Statistical Bureau, 2004).

The comparison between net enrolment rates for rural/urban, and poor/non-poor populations of 6-12 year olds and 13-19 year olds indicate significant differences in opportunity. For all groups there is a drop in the number of children continuing their education beyond primary school [Chart 1]. In each case a lower proportion of rural children continue schooling beyond age 12 than do urban children and this proportion is greater for poor and non-poor rural families compared to the urban counterpart sample.

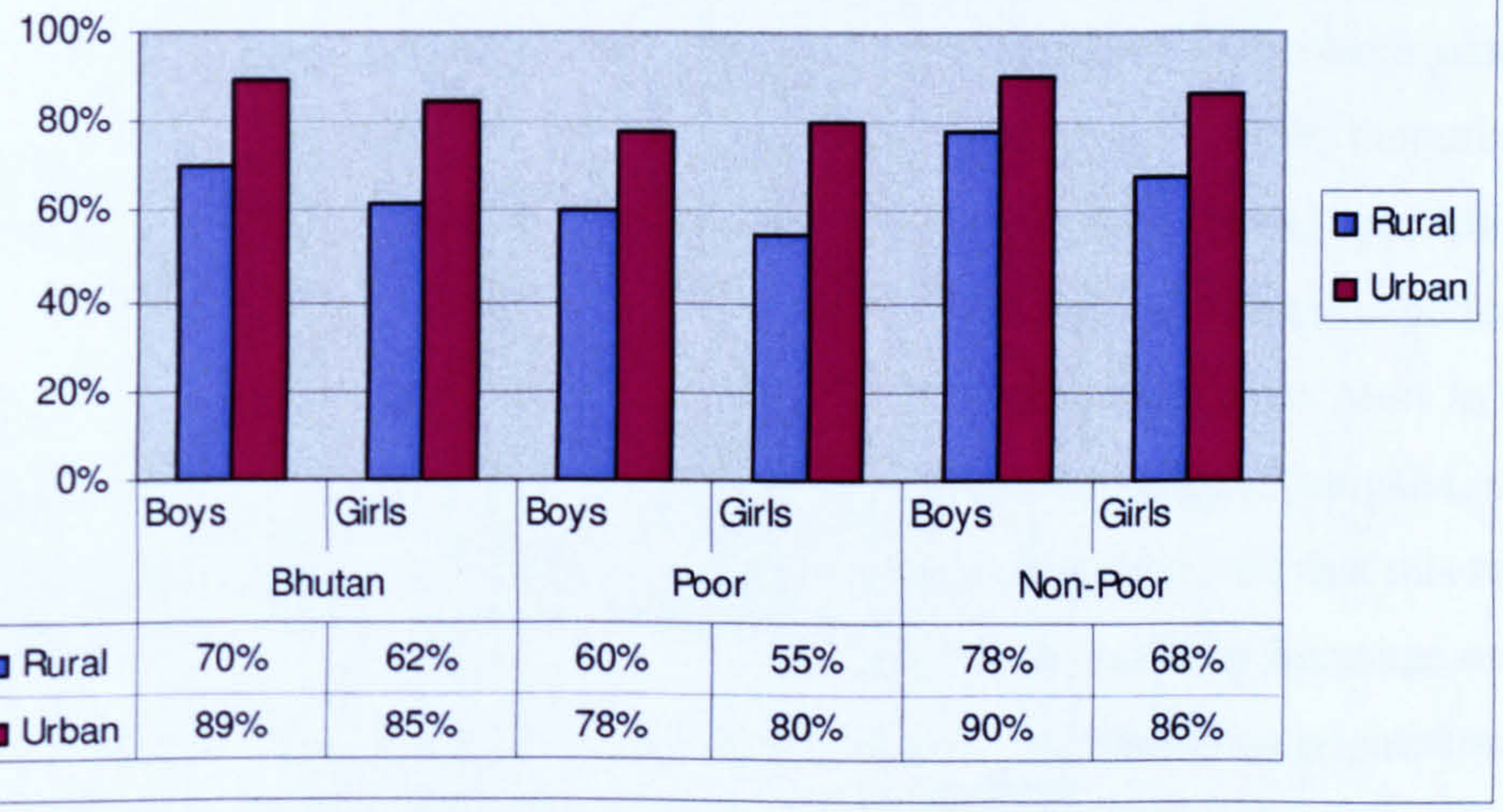
Chart 1. Rural/Urban Net Enrolment Rate of 6-12 and 13-19 year olds by Poverty Indicators
(Royal Government of Bhutan National Statistical Bureau, 2004)



	Bhutan			Poor		Non-Poor	
	Total	Rural	Urban	Rural	Urban	Rural	Urban
6-12 age group	70.20%	65.30%	88.90%	56.90%	80%	71.30%	89.50%
13-19 age group	52.20%	46.30%	77.30%	39.20%	77%	51.20%	77.30%

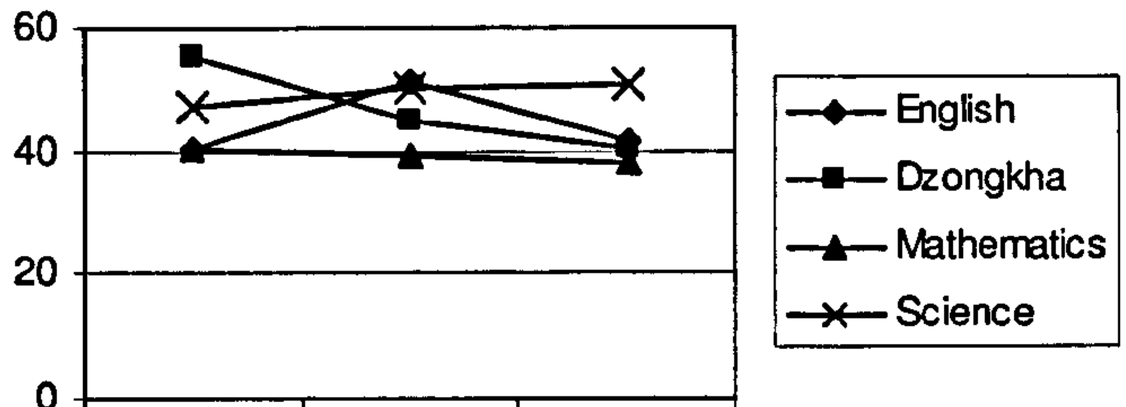
There is a marginal difference between girls and boys, indicating that a slightly higher percentage of urban girls from poor families attend primary school than urban boys from poor families with the reverse case in rural areas [Chart 2].

Chart 2. Rural/Urban Net Enrolment Rate of 6-12 year olds by Gender and Poverty Indicators
(Royal Government of Bhutan National Statistical Bureau, 2004)



	Bhutan		Poor		Non-Poor	
	Boys	Girls	Boys	Girls	Boys	Girls
Rural	70%	62%	60%	55%	78%	68%
Urban	89%	85%	78%	80%	90%	86%

Chart 3. Mean Scores: Grade VI Core Subjects
Bhutan - 1989 / 1997 / 1998
[Source: UNESCO 1999a]



	1989	1997	1998
English	40.23	51.54	41.66
Dzongkha	55.13	44.94	40.47
Mathematics	40.63	39.34	38.14
Science	47.4	50.22	50.98

Another perspective on learning for Bhutanese children is provided by trends in performance-based evaluation of student achievement in the core subjects from Grade VI national assessment test results. Mean scores in tests conducted in 1998 compared with 1997 and 1989 [Chart 3] show a significant improvement in performance in English for one year in 1997, steady improvement in science achievement, a small decline in mathematics performance from a low level in 1989 and a significant decline in performance in the national language, Dzongkha. During this ten year period from 1989 to 1998 rapid expansion in school enrolment had taken place. The country was modernising and contextualising its curriculum, and expanding its teacher training capacity. The test results may therefore reflect the many impacts of change as well as actual student achievement.

Data from the same source (UNESCO, 1999a) highlights some issues of data reliability and validity discussed in Chapter 2. It is impossible to judge from test scores alone whether there is content and construct validity in student assessments between years. A comparison between urban and rural student performance [Table 1] shows that urban children outperformed rural children in English but rural children performed better than their urban peers in the national language, Dzongkha, with the conclusion proposed that this result may be affected by language usage outside the classroom. Assumptions are made in comparability between populations and between cultures within one country context. The scores for mathematics and science

Table 1. Mean Scores: Grade VI Core Subjects Rural-Urban comparison

	1998		
	Total	Urban	Rural
English	41.66	44.57	36.98
Dzongkha	40.47	37.84	46.48
Mathematics	38.14	16.99	19.28
Science	50.98	25.84	25.25

[Source: UNESCO 1999a]

given in Table 1, extracted from the EFA Country Report (UNESCO, 1999a, Part II, Table 17), present apparently flawed data in which urban and rural scores do not correspond to the total scores given, raising issues of data reliability.

In Sri Lanka, poverty indicators and household survey data for the sample population show a level of poverty below the national average based on indicators such as type of lighting and cooking fuel used by households. For the sample population 44.6 percent of households used kerosene for lighting and 88.8 percent used firewood for cooking (Annex 1, Table 12). 64.15 percent of the sub-district sample population were classified as rural and the remainder of the sub-district population were tea estate workers. Within the sub-district 44.7 percent of the local population were recipients of Samurdi welfare assistance, a metric which corresponds directly to the percentage of the population living below the poverty line (Annex 1, Table 10]. These factors, indicative of rural, underdeveloped populations, contrast with national indicators that present a more optimistic view of economic growth and development (World Bank, 2003, p. 8).

Recent poverty survey data (Royal Government of Bhutan Department of Planning, 2002b, p. 33) indicates that families who consider themselves poor include "lack resources to send children to school" as one indicator of poverty and that lack of schooling may then be considered as a distinguishing feature of the poor. It is a relatively new indicator of urban poverty in Bhutan. Other indicators of poverty are lack of or inadequate size of land holding, inability to own a decent house and vulnerability to food shortage all of which relate to the defined list of fundamental capabilities discussed earlier in this Chapter. The poverty survey (Royal Government of Bhutan National Statistical Bureau, 2004) used a monthly income measure to calculate that 31.7 percent of the population lives below the poverty line. Using this metric 4.2 percent of the urban population fall below the poverty line compared to 38.3 percent of the rural population. On a simplistic level this is sufficient evidence to suggest a significant disparity between the urban and rural populations, an assumption which underpins the rationale of this study and which reflects also in the disparity in education service delivery between urban and rural communities.

Table 2. Distribution of Households by type of Assets Ownership by Area (Percent) [*Bhutan Living Standards Survey 2003*]

	Bhutan (100%)	Urban (22.81%)	Rural (77.19%)
Television	17.31	14.38	2.93
Radio	67.14	16.54	50.61
Computer	1.11	1.00	0.10

Other indirect relevance-based indicators of learning achievement observed from the study data include access to computer technology, radio and television [Table 2 (Royal Government of Bhutan National Statistical Bureau, 2003)]. In Sri Lanka the closest equivalent data indicates that there

were 7.1 personal computers per thousand people in 2000 compared with 1.1 per 1000 in five years earlier. Access to communication technologies such as radio, television and computers provides individuals with greater access to learning, so increasing their capability.

Annex 4 Applications for Approval to undertake Research Field Work

Approval for the Sri Lanka studies was granted by the Education Director (Schools) in Sri Lanka during a meeting in which the research was discussed. Approval for the Bhutan studies was granted by the Education Minister in Bhutan through formal application.

e-mail: marionyoung22@aol.com

3rd February 2004

Attention:
Honourable Minister
Lyonpo Thinley Gyamtsho
Ministry of Education
Royal Government of Bhutan
Thimphu, Bhutan

Subject: **Request for permission to undertake PhD research field work in Bhutan**

Honourable Minister,

I have completed one year of my PhD studies at the Institute of Education in London and will be undertaking the field work component of the research during 2004. My research topic originated from my close association with and considerable experience of education in Bhutan. Since my early experience as a VSO district resource teacher in Paro in 1989-1991 through to my work as Education Officer with UNICEF in 1999-2000 I have reflected on the specific educational needs of children living in rural communities. Now, with wider experience of education through my work in Tajikistan, China, Vietnam, Nepal and Sri Lanka I observe that there are global issues to be addressed relating to locally valued learning outcomes and capabilities. As a preparation for life, what are the most important learning outcomes for children, where are these "lessons" learned and how do they enhance children's lives?

I am writing to request your permission to undertake my PhD field work in Bhutan and to this end I have attached a research paper which I have prepared for your information. The paper outlines the research background and methodology I am planning to use and the sample group of informants I would wish to target. Detail of actual location would be decided at a later stage, based on specific research criteria and with full RGoB approval.

I am planning to pilot the research methodology in March 2004, in Sri Lanka where I am currently working as Project Manager and Senior Education Adviser on a DFID funded Primary Mathematics Project.

The main research is scheduled to be undertaken in autumn 2004 and would require a period of 5 weeks in one or two visits to the Kingdom. If approved, I would seek local consultant support by recruiting a Bhutanese research facilitator to conduct the focus discussion and participatory research in first language, with a translator to provide me with simultaneous translation into English. I will personally cover all the costs. My research findings will be made available to the Ministry of Education, RGoB, and I would welcome the opportunity as a final stage in the research, to consult with senior

education officers in Bhutan on the implications and lessons which can be learned from my research.

The Institute of Education, University of London, requires all post-graduate research students to sign an ethical statement based on the British Educational Research Association Code of Ethics. This ensures that the highest standards are maintained in relation to respect for persons, respect for knowledge, respect for democratic values and for the quality of educational research.

Sir, I would be most grateful if approval can be granted for me to undertake this research in Bhutan. I sincerely believe that it will make a worthwhile contribution to the global debates on quality and relevant Education for All.

Thank you.

Yours sincerely

Marion Young
Senior Education Adviser
Cambridge Education Consultants
Cambridge, UK

The Education Minister assigned the Education Director (Schools) to assist in the local arrangements for the research in Bhutan, as indicated in the following correspondence:

To: Tshewang Tandin
Education Director
Royal Government of Bhutan
Ministry of Education
Thimphu, Bhutan

11th July 2004

Dear Dasho

Re: PhD Field Work (October 2004)
Topic: Local Perspectives on Valued Learning Outcomes and Capabilities

I am now able to provide you with a clearer picture of my plans for the PhD research work I hope undertake in Bhutan in October 2004.

1. Flights
I have been granted leave from work from 1st October to 31st October 2004 and will make my visit to Bhutan for the whole of that period. I will arrange flights through our friend Madan Chhetri at WTS travel service in Thimphu.

2. Field Work Plans – location and sample

I will spend one week in Thimphu preparing for the field work, two weeks on data collection in the field, and one week back in Thimphu to de-brief and to obtain transcriptions of the field work tape recordings.

I have given careful consideration to the possible locations from which to select the best one to correspond with my research focus. The main criteria are:
- rural location
- access to high school /junior high school (14 year old students and dropouts)
- less developed ie. not a location which has received high impact development project inputs
- economically poor ie. some variety in livelihood opportunities for school leavers but limited.

I could target one or two centres for data collection, depending on the size of the local population. Three possible locations I thought of are:

(i) Tongsa - Kungarabten
(ii) Wangdiphodrang - Gaselo
(iii) Wangdiphodrang - Nobding

Gaselo was a consideration also because my old colleagues and friends from Paro were posted in Gaselo the last time I heard from them when I was in Bhutan last year - Jimba Dorji (headmaster) and Chencho Om (Jimba's wife). Are they still working at Gaselo?

Gasa, Phubjikha, Haa, Tshirang, parts of Bumthang and Dagana were all considered. Gasa is a little too time consuming to access. Phubjikha could be linked with Nobding. Haa has had particular influences from the location of the army camp in the valley which could distort the findings. Tshirang and Dagana would both be of interest as they have been relatively less impacted by or exposed to externally funded projects which would influence community perspectives on development (Zhemgang has not been considered for this very reason). Both Tshirang and Dagana would I suspect be problematic for permissions. Outlying parts of Bumthang would also be of interest, for example Tang and Shingkhar where there are opportunities and impacts of developments within reach at Jakar but not so directly impacting on the local communities.

This kind of rationale for selection of the final location(s) is of course the process I will need to present to my tutor, and will help you to understand my reasoning. In the pilot study which I conducted in Sri Lanka in March I had a final sample size of 32 school going 14 year old children (50:50 girls:boys), sixteen 14 year old school drop outs and 24 parents from the sample of school going and dropout children. A small sample of urban children from a poor part of Colombo were also gathered for discussions (6 school going and one dropout) to hear their perspectives. I would hope to have fairly similar samples in the main study including a small sample of children from Thimphu.

I would welcome any other suggestions you may have on the above.

3. Offical meetings and statistical data

I would also like to request a meeting with the Education Minister during my visit, both as a courtesy call and also to discuss my research topic with him. I have accessed some statistical, quantitative data from the Bhutan RGoB websites, in particular the Ministry of Finance, Department of Planning website containing all the five year plans, disaggregated to gewog level. It would be very helpful if I could discuss quantitative data with the statistics person in the Education Department. I am not sure whether the

Chief Planning Officer has changed recently – it was Tenzin Choeda when I worked as UNICEF Education Officer, if I recall correctly.

4. Research Assistant and Translator.
I will need to identify a research assistant and translator to assist me and to accompany me on the field work to whom I will of course pay and provide daily subsistence though my budget is very limited. I will make enquiries with Ugen Doma to find out whether she could identify someone suitable for this work. Please let me know if you have any suggestions.

5. Visa Application
Should we start by processing a visa application form for myself and my husband. Please advice me what I should do at this point.

Thank you and best regards

Marion Young

Senior Education Adviser
Cambridge Education, UK
Home Tel/Fax: 0044-1440-783355

ROYAL GOVERNMENT OF BHUTAN
MINISTRY OF EDUCATION
Department of School Education
THIMPHU : BHUTAN

Ref. No. DSE/1/2004/1421

5th October 2004

To,
The Dasho Dzongdag,
Dzongkhag Administration
Wangdiphodrang

Sub: Attachment of Marion Young to undertake Ph.D. Research field work

Dasho,

Ms. Marion Young and Captain David Young are in the country in relation to Ph. D. research field work of Ms. Marion Young.

They have selected your Dzongkhag for the study as there are a number of rural schools. The selection of the schools and other details could be discussed between her and the DEO. We would like to inform Dasho about this programme and for Dasho's kind support.

Enclosed: 1. Permission from CCM for the Research work.
2. Participant information sheet submitted by Ms. Marion Young.

Yours Sincerely,

(Tshewang Tandin)
DIRECTOR

Cc:-
1. Secretary, Ministry of Education.
2. DEO, Dzongkhag Administration, Wangdue.
3. Person concerned.

Ministry of Home and Cultural Affairs

Department of Immigration and Census

"Special Permit for Restricted Areas in Bhutan"

Permit No **6359**

Passport size photograph

Name **Marion Young**
David Young

Sex **M/F** Nationality **British**

Visa No **O/2341-2342** Passport No/Permit No/ID **703021522**
740063915

Valid upto **11/6/2004** Organisation **Dept. of School Education MOE**

Paro, Haa and Wangdue only

Is hereby permitted to visit/ stay in restricted areas viz.

From **06-Oct-04** To **23-Oct-04**

For the purpose of **To do research**

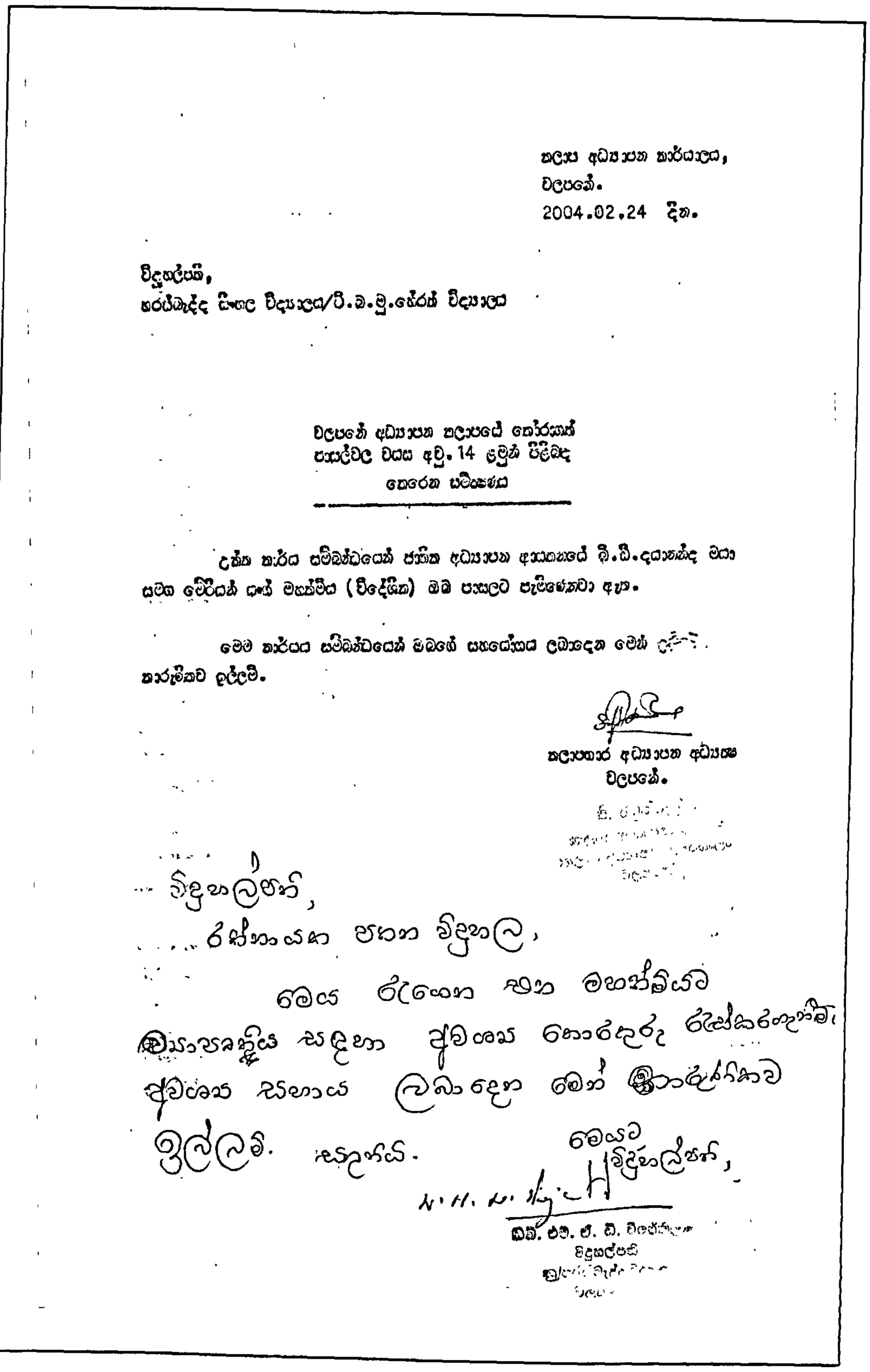
Place of Issue **Thimphu**

Date of Issue **4/10/2004**

Immigration Division
Issuing Authority

Note:

Any extension required should be obtained from the Department of Immigration & Census.
Any violation of the permit is punishable under the existing laws of the Royal Government of Bhutan



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Permission letter from the Regional Education Office, Sri Lanka allowing the research team to visit selected schools for the purpose of data collection – English translation below.

Regional Education Office
Walapane.

24th February 2004

The Principal
Harasbedda Sinhala College/V. B.M. Herath College

Survey of Students under 14 years of age attending Selected Schools in the Walapane Region

Mr. B. D. Dayananda of the National Education Institute accompanied by Ms. Marion Young (foreign national) will be visiting your school with reference to the above survey.

Kindly extend your cooperation.

Signed.

Regional Education Director
Walapane.

The Principal
Ratnayaka Patana College

Kindly provide the bearer all assistance in order to gather information to carry out the above referred to task. Thank you.

Signed.

Principal
Harasbedda College
Walapane.

Annex 5 Summary of Sri Lanka and Bhutan Samples

Initial selection of location and individuals was informed by advice and professional judgement from the District Education Officer of the selected district. National and district economic and educational indicators were also used in the selection process (Annex 1). The rural and urban areas which were selected have a higher than average percentage of the population living close to or below the poverty line (See Poverty Line definitions – Annex 1 and 2). The rural schools were selected by geographical location (remote and economically vulnerable) and were linked to each other by catchment area. The research sample of 14 year old children and their parents was drawn from rural schools and urban schools. The sample included non-schooling going children identified by the school head teacher. The Sri Lanka sample (Table 17 & Table 18) and the Bhutan sample (Table 19 & Table 20) are similar in composition.

Table 17. Sri Lanka Sample - Primary Informant Groups

		Attending school – Grade 9 14 yrs old in 2004			Not attending school 12-16 yrs old in 2004		
			Mothers of sample	Fathers of sample		Mothers of sample	Fathers of sample
School 1 - rural	Boys	12	5	0	3[20]	1	1
	Girls	12	10	2	0	-	-
School 2 - rural	Boys	-	-	-	3	1	-
	Girls	-	-	-	5	3	1
School 3 - urban	Boys	6	-	-	1	-	-
	Girls	6	-	-	0	-	-

Table 18. Sri Lanka Sample - Secondary Informant Groups

<u>FROM THE COMMUNITY OF SCHOOL 1</u>	
I. Agriculture Extension Worker	II. Zonal Education Deputy Director (Planning)
III. Divisional Secretariat Officer	IV. Community Health Worker / Mid-Wife
V. Three teachers originating from the locality	VI. Tea Estate Manager
VII. Priest	VIII. School Principal
XI. Liaison Officer of Technical College	
<u>FROM THE COMMUNITY OF SCHOOL 2</u>	
I. School Principal	
<u>FROM THE COMMUNITY OF SCHOOL 3</u>	
I. School Principal / Priest	

[20] This sample were, by chance, special needs children who had recently dropped out of school.

Table 19. Bhutan Sample - Primary Informant Groups

		Attending school – 14 yrs old in 2004			Not attending school 12-16 yrs old in 2004		
			Mothers of sample	Fathers of sample		Mothers of sample	Fathers of sample
School 1 - rural	Boys	6	2	1	3	1	1
	Girls	6	3	-	3	3	-
School 2 - rural	Boys	6	1	-	-		
	Girls	6	1	-	1		
School 3 - rural	Boys	8	2	1	-		
	Girls	9	6	1	4		
School 4 - urban	Boys	7	2	1	-		
	Girls	5	1	-	-		
NFE 1 - rural	Boys				2	1	-
	Girls				3	2	1
NFE 2 - rural	Boys				1	-	-
	Girls				4	4	1
TOTAL	Boys	27	7	3	6	2	1
	Girls	26	11	1	15	9	2
TOTAL		53	18	4	21	11	3

Table 20. Bhutan Sample - Secondary Informant Groups

I.	Four Head Teachers	II.	District Education Officer
III.	School Caretaker (knowledgeably skilled/uneducated)	IV.	Basic Health Worker
V.	Two teachers originating from the locality	VI.	Local NGO Officer
VII.	Three Local Religious Leaders	VIII.	Livestock and Forestry Officers
XI.	Locally elected representative in National Assembly	X.	NFE Instructor
XI.	Education Planning Officer	XII	Minister of Education

Annex 6 Training Programme and Training Guide

Three days of training and familiarisation with the subject and the methodology was provided by the researcher for the research facilitator and the translator structured into background information and practical familiarisation with the research tools. Two documents formed the basis of the training: a training guide and the semi-structured interview guide.

Training Programme

Session 1. Training for Research Facilitator and Translator – Background Information

Session 2. Training for Research Facilitator and Translator

Session 2a - Research Methodology

Session 2b - Field Work Checklist

Session 2c - What problems, questions and concerns do you have?

Session 2d - Research Process and Research Instruments

Session 2e - Questioning skills

Session 2f - Semi Structured Interview Guide (SSIG) and Focus Group Discussion (FGD)

Training Guide

Session 1. Training for Research Facilitator and Translator – Background Information

Research Topic: Local Perspectives on Valued Learning Outcomes and Capabilities

Background

The aim of the research is to gain some understanding of human development in relation to learning outcomes and capabilities. The research will focus on what local communities value as important for children to learn and why the learning outcomes they value are considered important. What does learning mean for different communities and how does learning create or contribute to opportunities for individuals and communities to develop? What aspects of learning enhance peoples' freedoms to live the lives they would choose?

Human Development and Education

Human development is generally measured statistically, using indicators of economic growth or national data on, for example, improvements in health and education. National governments and international development agencies rely heavily on such quantitative

evidence to demonstrate trends over time and to compare performance of one nation with another. Qualitative indicators of human development and education achievement present a methodological challenge to traditional global measures. Qualitative data provides valuable and complementary perspectives, enabling local levels of analysis through disaggregation of data, and giving focus to diversity in development.

Education is a key aspect of development for individuals, communities and nations, the importance of which is recognised in the Education for All initiative and in the fundamental right of all children to be able to access relevant, quality basic education. Globally, an estimated 120 million primary aged children are out of school. Many more children who attend school do not receive basic education of relevance or good quality and do not reach a minimum standard in functional literacy and numeracy.

Rural communities in developing countries are particularly vulnerable to poor quality education provision. Children in rural under-developed communities are less likely than urban children to enrol in school, and those who enrol are less likely than their urban peers to complete primary school. Teaching quality and the standards of school facilities are often poorer in rural communities than in urban centres. The effect on school outcomes is predictable and can be easily shown in examination results. In performance-based market economies school results open or close opportunities for children.

This is one perspective on education through the lens of formal schooling. Basic Education for All, including functional literacy and numeracy, is undisputed as a goal to be achieved for all children in the longer term. However, this perspective takes no account of learning which takes place beyond the school, which is valued by individuals and communities, which encompasses everyday essential life skills, and which is an important preparation for life. In particular, in rural economies there may be other learning priorities linked to survival and intergenerational transmission of knowledge, skills and cultural tradition in which other learning outcomes than those of a performance-based, global model of education are prioritised.

Education and Learning

"*Learning and teaching are not inherently linked. Much learning takes place without teaching, and indeed much teaching takes place without learning.*" (Wenger, 2002, p. 266).

"*Knowledge acquired in the school context is often the only kind of knowledge for which formal accreditation can be obtained.*" (Visser, 2000, p. 32).

"*Information about learning and knowledge systems other than the school system is largely lacking.*" (Visser, 2000, p. 33).

A key issue in this research is that valued learning is much broader than simply schooling and school results. Communities may identify other valued learning outcomes which are relevant to their culture and local economy and which constitute important and essential life skills as a preparation for life and as a lifelong process, not limited to learning institutions.

The Research

This research will use qualitative data from small scale, localised contexts to investigate ways in which communities interpret valued learning outcomes including sociological, cultural, historical and economic influences. The investigation seeks to identify local perceptions of important learning outcomes and how these affect the individual's freedom to live a better life.

Criteria for Sample Selection:

The research aims to identify **local perspectives on valued learning outcomes and capabilities**, a topic which is universally applicable to all people. However, for the purposes of this research and as a first stage in narrowing the scope of the research, a broad target group has been selected - **14 year olds in rural communities in developing countries**. The reasons for this selection are as follows:

- 14 years old is the age at which basic formal education is, technically[21], completed in many developing countries. This period of basic education is considered sufficient to provide children with a foundation in basic literacy, numeracy and essential life skills (UNESCO, 2001). Furthermore it is an age of transition from childhood through adolescence to adulthood, with the attendant shifts in responsibility which come with maturity. By the age of 14 young people are able to reflect back on their earlier learning experiences, formal and informal, and can look forward to consider how this learning has helped prepare them for life. They are able to articulate their views and aspirations, while perhaps also having some perspective on the changes taking place

[21] For children who start formal school at 5-6 years old in a 9 year basic education cycle, with no repetition years, as advocated in the Education for All goals.

within their culture and community in relation to valued learning outcomes and capabilities.

- Rural communities in developing countries are often harder to reach in terms of provision of quality education relevant to social, economic and cultural development needs. Ethnic, language, cultural and economic challenges may cause lower than average scores on the standard indicators of enrolment, completion and examination results. Local indigenous skills and knowledge are often important for survival and sustainable development in rural communities.

Criteria for Selection of Individuals and Groups of Informants:

Informant groups will be selected with local assistance from the district education office and the research facilitator. The sample will consist of small groups (3-5 people per group):

Primary Informant Groups

14 year olds		fathers		mothers	
Girls	attending school	fathers of	14 yr old girls attending school	Mothers of	14 yr old girls attending school
Boys	attending school	fathers of	14 yr old boys attending school	Mothers of	14 yr old boys attending school
Girls	not attending school	fathers of	14 yr old girls not attending school	Mothers of	14 yr old girls not attending school
Boys	not attending school	fathers of	14 yr old boys not attending school	Mothers of	14 yr old boys not attending school

In addition to the twelve primary informant groups above, secondary informant groups will be identified from the particular community. The secondary informant groups will be drawn from community members with a specific relationship to the primary informant groups of 14 year olds, and will include teachers or other district level educators. Active community leaders from religious groups, local employers or outreach workers may also provide useful and contrasting perspectives on valued learning outcomes and capabilities.

Data Collection

Five instruments have been developed for data collection.

1. Tabulation of Educational and Economic Indicators – Comparative data from national statistics of educational and economic indicators disaggregated by rural and urban location will be compared against the local community data. National statistics will be accessed from the Ministry of Education Office of Statistics. District level

disaggregated statistics are available from the district education offices. School level statistics will be obtained from the schools and from the district education offices. The District Administrator located in the pilot district will be able to provide local data in addition to assisting with the local level logistics.

2. Focus Group Discussion – a two stage process will be used to elicit information from the primary and secondary informant groups, led by the research facilitator, in the informants' first language.
   i. Semi-Structured Interview Guide
   ii. Ranking of Valued Learning Outcomes

   The interview guide and ranking activity will be discussed in detail during a two day training of the research facilitator and translator. The training will be given by the researcher with support from an experienced education researcher.

3. Village Mapping - illustrating valued learning locations identified by the primary informant groups, including the mapping of knowledgeable, skilled people, what they do and how their knowledge is passed on.

4. Learning Story Lines – to capture recollections of the significant learning events in the period up to 14 years old for individuals from the primary informant group.

Research Timeframe

The research will be piloted for methodological robustness and trustworthiness during 2 weeks in March/April 2004 in Sri Lanka, the present work location of the researcher, engaged in an education project. It is anticipated that the main research will be undertaken in Bhutan during 5 weeks in autumn 2004. The researcher is familiar with the education systems and cultural settings of both countries having worked extensively in primary education in both countries over the past 15 years. The language barrier means that the researcher will need to recruit and train a research facilitator and a translator to accompany her on fieldwork.

Research Outcomes

It is intended that the research will provide a prototype for a generic indicator of learning outcomes and capabilities framed on valued, qualitative measures which offer a disaggregated base that captures heterogeneities and is inclusive of all children. The outcomes will inform education planners and policy makers of local, in contrast to global, perspectives and will challenge performance based models of education outcomes.

Session 2. Training for Research Facilitator and Translator
- Research Methodology

Session 2a. Some Basic Reminders about Research Methodology

The approach we are using is participatory and qualitative. We are interested to hear the local perspectives of the informants. There are no right and wrong answers. Our views should not be aired or shared as we might bias their responses.

If participants have a difference of opinion, accept both and try to explore why there are differences. Check to find out if there is consensus, especially if one or two people dominate the discussion.

Avoid repetition. Questions can be skipped over if you/we feel that the points have already been made.

Pursue lines of special interest to the participants even if it moves us away from the main point (within reason); but don't let the discussion drift off at a complete tangent.

Probe a point if the meaning is not quite clear. Ask the informant to give an example or check their meaning by reflecting back - "I see, that's very interesting. So can you tell us again why you think these skills are especially important?"

If participants are finding it difficult to give individual responses, ask them to discuss amongst themselves and ask one or two people to report back after a few minutes discussion.

Session 2b. Field Work Checklist

- Does the host community know when we will be arriving and how long we will stay?
- Who is our main contact person for approval / for logistical arrangements?
- Are there any important events in the community at the time we plan to visit?
- Do the local participants know why we are coming? Have they received the leaflet?
- Will we be able to meet each group separately and what are the convenient times and places for those meetings?
- Is it possible to stay in the community?
- What are the practical arrangements?
- If we cannot stay in the village where is the closest convenient location?

- What arrangements can be made to provide food for the team and for the participants?
- What do we need to bring with us – food / drinks?
- Who will cook?
- How will we get to and from the village site?
- What materials do we need? Paper, chart paper, tapes, batteries, pens, notebooks, etc.

Timing and location of the focus group discussions and activities:

- What is a good time of day for the informants?
- How long can they stay?
- Where is a good place to meet (outside school for non-attenders)?

These are the basic ways in which we can prepare and undertake the participatory research:

- Know our team – get to know and understand each other and how to work together.
- Know the context – get to know the locality and the focus of the research.
- Sensitive listening skills – practice and be aware during the sessions including body language, seating arrangements, who participates and how. Don't interrupt.
- Sensitive questioning skills – practice and be aware during the sessions / probe gently / encourage / be respectful of everyone. Don't dominate. Try to elicit what hasn't been said. Encourage discussion and debate within the group of participants.
- Careful interpretation of responses – ask for clarification if necessary / don't jump to conclusions too fast / try not to pre-judge (prejudice) the responses / keep an open mind / check for consensus or alternative points of view.
- Keeping careful records – take notes of anything you think important and share / make diagrams of the groups with ID numbers / record who said what / make a photo of diagrams-village maps / add in key discussion points / record main discussion points onto cards for ranking and learning story lines.
- Review each session – write up notes and reflect on overall impressions / share / what was effective-what was not / clarify ambiguities.

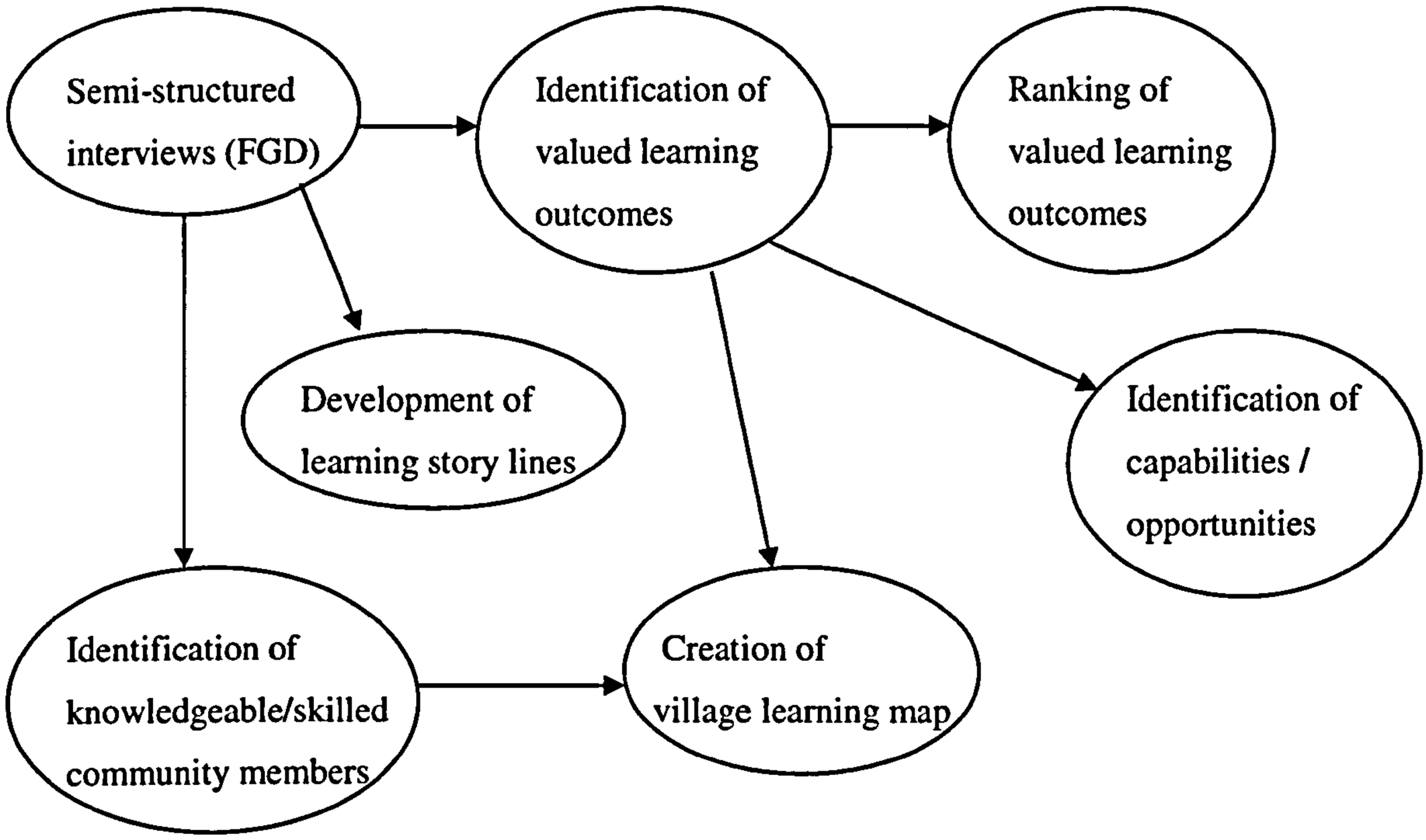
Session 2c. What problems, questions and concerns do you have?

- now
- later .... make opportunities to share, discuss and solve problems

Here are some suggestions – we can add and discuss more:

Problems	Solutions
▪ Group dynamics and conflict.	Introductions Accepting everyone's ideas Encouraging quiet ones and quieting stronger participants
▪ Feeling of low self-esteem with the non-attenders	Ensure that they understand that we do not think it is wrong or bad that they have left school. We are interested to understand more about what they are doing now, what they feel they are good at doing and hoe they learned this, and what they want to be able to do in future.
▪ Feeling of low self esteem by parents.	Ensure that we value what they think is important and we are interested in hearing their views and ideas about their children's learning.
▪ Shyness or reluctance to talk.	Provide opportunities for people to discuss in small groups if necessary or talk with a person in a one to one way rather than asking the group for a response. Make the question or focus topic less personal by asking what people in the community generally do or believe to be important rather than specifically what that person believes.

2d. Research Process and Research Instruments



[See attached pages describing the research instruments – Annex 8]

Session 2e. Questioning skills:

Are you comfortable with the differences between closed questions, leading questions, ambiguous questions, problems of asking too many questions at a time or suddenly changing the topic?

- Together we can come up with some examples of each question type .....

  Closed questions

  Leading questions

  Ambiguous questions

  Too many questions in one statement

  Sudden change of topic

- Practice changing an ambiguous question and a closed question to an open question.

- What kinds of questioning could be taken as insensitive? Can you come up with examples from your experience?

- How can you re-phrase bad questions? Can we think of some examples and re-phrase?

- The where / what / when / how / who / why questions elicit the most information. Practice to find out some more about each other – either professional backgrounds or personal family backgrounds

2f. Semi Structured Interview Guide (SSIG) and Focus Group Discussion (FGD)

The FGD will be tape recorded. At the same time simultaneous translation into English will also be tape recorded.

NOTE: Use open ended "sign-posts" of issues to explore informants' views and perceptions:

- We don't know the village very well. What is on that side of the village?
- We would like to hear your ideas on ……..
- We are interested to hear about your experiences …….
- What do you think is most important for …….. ?
- Why do you think it is important for …….. ?
- What do children in your family need to be able to know / to do …… ?

Research Facilitator	Observer / Translator
Introductions Begin by introducing each of us by name and where we are from – my leaflet should have been distributed in advance, if not, provide copies. Read the leaflet to the group. Explain the purpose of our visit "We are interested to find out from you about the kinds of things which people in your village are good at doing and which they enjoy doing; about what you think it is most important for young people to learn; about how people have learned the things they know and the things that they do; and also about the things you would like to be able to do but for some reason you are not able to do." Explain why we chose their village with some positive comments to assure them that we are not there to criticise or inspect.	Make a diagram of participants and reference number each one for note keeping.

Explain that the information which people share with us will be confidential and is being gathered for my study not for any official reasons. Remind people that they do not have to answer questions if they do not want to and that they are free to leave if they wish to. Inform people that we will be tape recording the discussion so that we can re-play and listen again later. Explain a little about the activities we are planning to do with them and that we hope they will find them interesting and enjoyable. Tell them how long we plan to spend with them. Assure the participants again that we are interested to hear about their experiences. Ensure that they understand that we have not come from a project and that we will not be doing any other activities in their village. Thank them for their participation and cooperation.	
Use the first question on the IG as a way to help people in the group to introduce themselves by telling us a little about what they are good at doing and how they learned to do these things.	Write the core activities on card / list how where / from whom on reverse – informant code
Sequence of questions can be altered as appropriate to the direction taken by the informant groups.	

Annex 7 Research Team – Professional Expertise

Sri Lanka Biodata Summary:

Research Assistant: Female. Degree in Rural Agriculture and training over a period of years in participatory research methodology including several direct training courses from Robert Chambers. Recommended by a local NGO consultancy partnership. Had undertaken a number of research consultancies in agriculture and rural development including with World Bank. Quiet spoken but able to lead / facilitate participatory discussion in Sinhala and English.

Research Translator: Male. Retired High School English teacher from the rural locality. An excellent translator both simultaneous and in summary. Highly respected and very well-known which was an enabler to facilitate quick and easy access to district offices and to schools. Local status was a slight barrier because children and parents knew and respected the translator as a senior member of the community and the translator had a personal engagement with the discussion topics. Overall the constraints and benefits balanced each other and enabled all the plans to be achieved.

Bhutan Biodata Summary:

Research Assistant: Female. Ex-Deputy Director, Ministry of Education, resigned to take up consultancy work. Experienced teacher and education planner with extensive knowledge of the education system and the remote and urban communities of Bhutan. Well-known to district administration offices and schools and professionally highly respected, which facilitated the field visits. Not known to local village people so not an inhibitor to discussion any more than any other external visitor, locally / culturally accepted as worthy of respect. Very good rapour in discussion groups and excellent English and local language.

Research Translator: Female. Grade 12 school graduate with excellent language skills including English, the national language of Bhutan and several local rural dialects. Confident but with a quite manner and listening attitude. Had participated in other research studies with local NGOs and had some experience of research methodology but had previously worked in a team with highly structured data sheets to be completed. Quick to learn new skills.

Annex 8 Research Tools: Semi Structured Interview Guides 1 and 2

Two parallel research tools were developed for the empirical study, one for discussion with groups of children and one for discussion with groups of their parents. Selected questions were also used as the basis for discussion with secondary informant groups.

Semi-Structured Interview Guide 1. FINAL VERSION

For use in Child Focus Group Discussions (group size 3-6)

Introductions: Name/number badge

Each person states their hobby, village and mother / father occupation

Questions / Probe Points	Notes	Materials
1. What are some of the important things you have learned at home, in the school in the community, with your friends? Why do you think these things were important for you to learn? Which things are you most interested to learn? →	→ Ranking	Card Flip chart paper Pens / Blutak Chart
From whom did you learn and at what age? (5-10, 10-14, 14-18) →	Learning Story Lines	Chart
2. What are the main occupations people do in this village? What are people in this village interested to do? What skills knowledge do they need? How did they learn those skills / knowledge? →	List on a flipchart Village Learning Map	Chart
Probe points: *- by observing others (who?)* *- someone showed them / helped them (who?)* *- by practising* *- they had lessons / training (how/where/cost?)*	Also use in secondary informant FGD	
3. What is it important for 14 year olds to be able to do in the village where you live? *Probe points:* *In the home, the market, measuring things, helping with the work, doing jobs, languages / communication, environmental awareness, health knowledge, agriculture, culture, travel and things about the world, mechanical things (vehicles, computers) mending things, building, cooking, making things for the home and family*	Also use in secondary informant FGD	

7a. What are your mother and father good / skilled at doing? How did they learn? What special equipment or other things do they need to be able to do these jobs? At what age can you begin to learn those things? Are you learning to do those things now?	→ Learning Story Lines	Chart
8. What are the opportunities open to children in each category: - Children who left school with no formal qualification? ➢ before completing Grade 8 ➢ completed Grade 8 - Children who left school with O levels? - Children who left school with A levels?	→ Opportunities Chart Also use in secondary informant FGD	Chart
9a. SCHOOL ATTENDERS QUESTIONS What will you choose to do and why? Do you have a choice? What kinds of learning do you think will be important in what you want to be able to do in future?		
9b. NON-ATTENDERS QUESTIONS What are you doing now? What would you like to be able to do in the future? What kinds of learning do you think will be important in what you want to be able to do in future?		
11. In what ways can mothers and fathers be involved in their child's learning? FOR SCHOOL ATTENDERS ONLY - TUITION – Do you attend tuition? – How much time, how valuable is it (for passing exams, for learning things which are included as important)?	Also use in secondary informant FGD	

Semi-Structured Interview Guide 2. FINAL VERSION

For use in Mother / Father Focus Group Discussions (group size 3-6)

Introductions: Name/number badge

Each person states their occupation, village and mother / father occupation

Questions / Probe Points	Notes	
1. What are some of the important things you have learned at home, in the community? Why do you think these things were important for you to learn? →	Ranking	Card Flip chart paper Pens / Blutak Chart
How did you learn to do these things? From whom did you learn and at what age (child/adult)? →	Learning Story Lines	Chart
2. What are the main occupations people do in this village? What are people in this village interested to do? What skills knowledge do they need? How did they learn those skills / knowledge? →	List on a flipchart Village Learning Map	Chart
Probe points: *- by observing others (who?)* *- someone showed them / helped them (who?)* *- by practising* *- they had lessons / training (how/where/cost?)*	Also use in secondary informant FGD	
3. What is it important for 14 year olds to be able to do in the village where you live? *Probe points:* *In the home, the market, measuring things, helping with the work, doing jobs, languages / communication, environmental awareness, health knowledge, agriculture, culture, travel and things about the world, mechanical things (vehicles, computers) mending things, building, cooking, making things for the home and family*	Also use in secondary informant FGD	
7b. What was your experience of learning as a child up to the age of 14 years old? What special equipment or other things do you need to be able to do your work? At what age can you begin to learn those things? →	Learning Story	Chart

Are your children learning to do those things now?	Lines	
8. What are the opportunities open to children in each category: - Children who left school with no formal qualification? ➢ before completing Grade 8 ➢ completed Grade 8 - Children who left school with O levels? - Children who left school with A levels?	→ Opportunities Chart Also use in secondary informant FGD	Chart
9a. PARENTS OF SCHOOL ATTENDERS QUESTIONS What will your child choose to do and why? Does he/she have a choice? What learning outcomes do you think will be important for your child in future?		
9b. PARENTS OF NON-ATTENDERS QUESTIONS What is your child doing now (for work)? What would you like your child to be able to do in the future?		
11. In what ways can mothers and fathers be involved in their child's learning? FOR SCHOOL ATTENDERS ONLY - TUITION – Does your child attend tuition? – How much time, how valuable is it (for passing exams, for learning things which are included as important)?	Also use in secondary informant FGD	

Annex 9 Issues of Data Collection - Methods and Modifications

Modifications to Research Tools and Methodology

During the three days of training and familiarisation with the subject and the methodology provided by the researcher for the research facilitator and the translator, questions in the SSIG were refined and the meaning of some terminology was discussed especially in relation to translation ambiguities. The first four focus group discussions in Sri Lanka were used as practice sessions. Changes made to the research tools after Practice I and II were trialled in Practice III and IV. Changes were made through discussion with the team on the basis of improving the reliability of information by re-thinking terminology and also by streamlining the interview structure, by re-ordering questions and by introducing flipcharting of main discussion points.

Changes made after Practice I and II

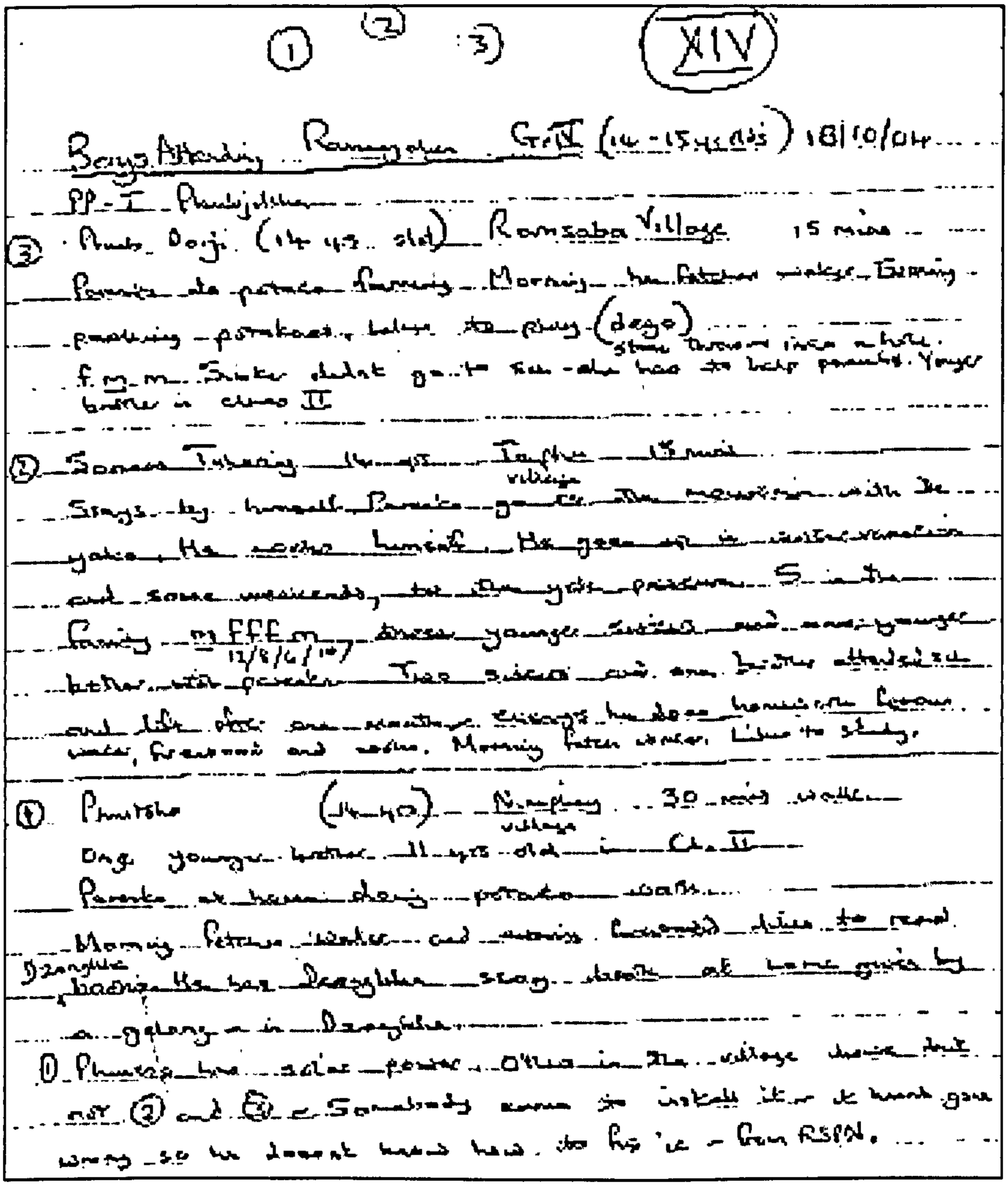
- Introductions modified to include name of village, child's hobbies and mother / father occupation provided by each informant.
- Use of flipcharts rather than FGD cards for listing and ranking of important learning outcomes, including what is learned at different ages (learning lines); listing of main occupations in the village and occupations open to school leavers at different stages of formal education.
- Revision of some questions in parents SSIG guide to ask about their experience (FGD question 1) and to ask about their children's experience (FGD question 8 & 9).
- Ranking and Learning Lines included in FGD question 1
- Village mapping included in FGD question.2
- Wording in FGD question 1 changed from important things learned to important tasks they do (for mothers and fathers)
- Village mapping was to be done with parents and dropouts using sand and stones etc. This was not possible due to the disruption it would cause the classes in the school.

Issues arising in Practice I + II:	**Solutions / Revisions:**
RF tried to cover each question in too much detail	Questions discussed, revised and re-ordered
RA asked children to write their responses on papers – too time consuming and too difficult for some to manage. This is not possible for many parents and dropouts.	Activities changed to recording on flipcharts. Activities linked directly to FGD questions
linked problem: TR scribed on flipcharts for RF so not available for translation of discussion points. TR also became too involved and assertive in the discussions	RF re-asserted lead in discussion and scribed at the same time TR re-focused on accurate translation
Some discussion points were missed in translation as TR became involved in discussion Missed out WHY is the valued learning important?	Flipcharted responses are easily translated and available as a record for analysis. Transcriptions of the taped discussions are being prepared by another TR..

Annex 10 Transcripts of Focus Group Discussions

The transcripts copied into this section provide examples of the researcher notes recorded during simultaneous translation of focus group discussion and the subsequent translation from the tape recording of the same session.

Researcher Transcript 1 **14 year old boys attending school, rural Bhutan**
18th October 2004



① ② ③ XIV

Boys Attending Ramsaba GVS (14-15 yrs olds) 18/10/04

PP-I Ravi Jhakri

③ Ravi Darji (14 yrs old) Ramsaba Village 15 mins

Parents are potato farming. Morning he helps village Evening - playing - potatoes help to play (daye) stay home once a week. from School didn't go to school has to help parents. Younger brother in class II

② Sonam Tshering Lepcha Samdi village

Stays by himself Parents go to the mountain with the yaks. He cooks himself. He goes to the mountain with the and some animals, to the yaks pasture. Sister is family 17/8/6/07 three younger sister and one younger brother with parents. Two sisters and one brother attending school and like play and sometime studies he does homework house work, firewood and cow. Morning listen music. Like to study.

① Phuntsho (14yrs) Nimpiny village 30 mins walk

One younger brother 11 yrs old in Class II

Parents at home sheep potato farm

Morning listen radio and music Evening like to read Dzongkha books He has Dzongkha story book at home goes by a glory in Dzongkha

① Phuntsho has solar power. Other in the village does not ② and ③ Somebody come to install like he have gone way so he doesn't have to go 'e - from RSPN.

Learning at home

- potato farming and harvesting
- collecting firewood from the forest
- Feeding with boiled cassava for breakfast
- fetching water and vegetables from neighbours (2) and Yaro

Each day mothers wake up by approximately 5:30 hours
sings for one day and takes vacation up
Weeding and village he should help the male brother and sisters
Also cooking helps the mother Change Father Soil Cleaning
prepared by where Kin dried and eat the porridge Kin breakfast,
Phones has trained by elder brothers help the drive Using drive
(3) has power-tiller - though he/she has to drive super drive
with 15 yrs old you can train - They start use the tractor and plough
now.

Learning in School

- How to read and write / play / sing
- the parts of animals - and knowledge on Personal
with Friends
- have work They start learn at home and at school
- learned Just when you are calling not to be naughty -
- If there is a leg on the way not to touch the dog.
- When you train the cattle not to hate other people cattle
- to study well.

Born to Pupils / Daughter but not to Thumpin. They learn
where the land lands and when the villages are harvesting.
Growing games and daughters they learn how for shopping.
- To change the water in the pots.
- What different things do you see?

Pets - don't different houses - When he (2) sees Those Vehicles
he wonders where Those vehicles go the way. They see
vehicles going to Mbeya. They see Bus Airplane they want to
go in it They wonder the size of the house

Translator Transcript 1 **14 year old boys attending school, rural Bhutan**

Rameychen

Boys Gr. IV . Rameychen (16-10-04)

① Phub Dorji Age = 14yrs old, Village - Rameychen (15min)
Q. Do you have parents at home? What does they do?
⇒ Yes. they do potato work
Q What did you do in the morning? After school what will you do?
⇒ fetched water, has to pack the potatoes
Q what do you like to do?
⇒ playing games
Q what game?
⇒ Dangar — need go to Tarsa - helps the parents.
⇒ one elder sister and 1 younger brother — class II 12yrs old.

② Sonam Tshering 14yrs old, Village - Taphu (15 mins)
Q Do you have parents at home?
⇒ NO. — (himself alone) - home.
Q Where are your parents?
⇒ with the yak Parents stays with the yak in the mountain (whole year)
⇒ He goes up in the winter vaccation.
⇒ Has 2 younger sister 1 younger brother — 10 yrs old 12 yrs old, 8 years old, 6 yrs old
⇒ None of them are in the school.
⇒ 2 sister and brother did go to school, Ramcychen Taphu

③ Phuntsho - 14yrs old, Village - Numphey (30 min)
1 younger brother - Vky 11yrs old in class II.

(2) Sonam Khenng - what do you do in the morning and evening?
→ evening - homework, fetches water and wood, cooking
morning - fetch water, cooking
Q what do you like to do?
⇒ likes to study.
⇒ Only father and mother at home.
Q What does they do?
⇒ potato work.
Q what do you do in the morning and evening?
⇒ morning - fetch water
Evening - collects firewood
Q What do you like to do?
⇒ likes to read storybook - written in Dzongkha
⇒ Bhub Dorji and Bhandhu have cedar at home
Q what do you learn at home?
⇒ farming work - potato work and gathering wood
collecting firewoods from the forest
farming (corn and bamboo) harvesting grains
⇒ They sell their yak product in village Phobjikha and Wangdue.
Q at school what do you learn?
⇒ learn to read and write
⇒ games
⇒ Songs
Q with friends
⇒ they learn what they don't know
Q In the community.
⇒ They have been to Phobjikha and Wangdue
Farthest Gangtey - shopping, Wangdue = shopping
They go to Wangdue once in the year

⇒ They have not heard computer

a. What are the main jobs in your village?

⇒ carpentry, farming, diving, spairing radio, blacksmith
(they dont have blacksmith in their village)

a job opportunities

Before Gr.8 = dont know

After Gr.8 = dont know

After Gr.10 = NFE instructer driver, tailoring

After Gr.12 = teacher Doctor army, clinic nurse, Manager

a. What would you like to do when you grow up?

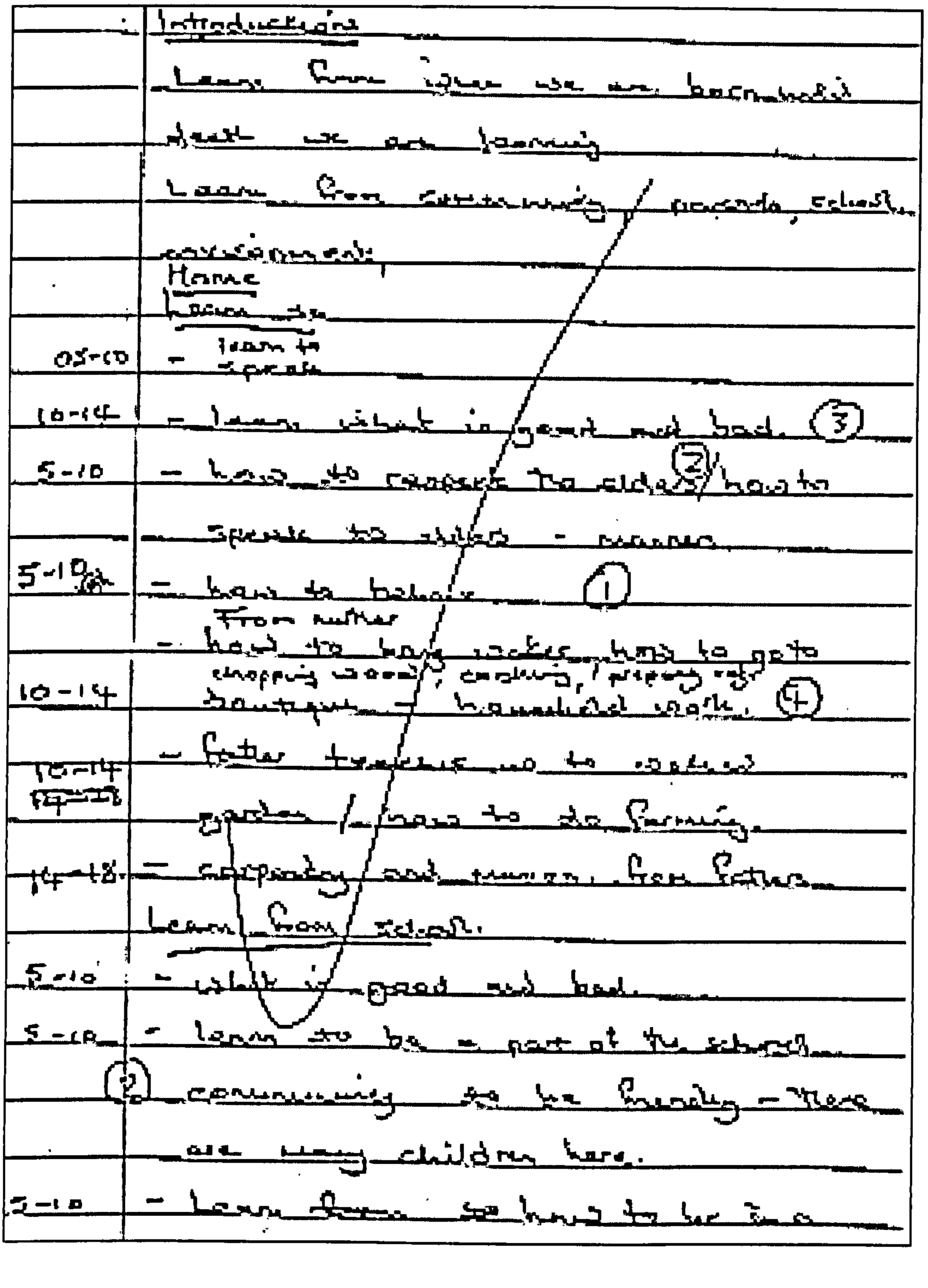
⇒ Teacher :

⇒ Pilot :

⇒ Doctor :

a. Conclusion = same

Researcher Transcript 2 **14 year old boys attending school, rural Sri Lanka**
9th March 2004


Introduction

Learn from life as we become adult

Adult as per learning

Learn from surroundings / people, school, society

Home

Birth to

05-10 - learn to speak

10-14 - learn about in good and bad (3)

5-10 - how to respect to elders (2) / how to

Speak to others - manner

5-10 - how to behave (1)

From mother

- how to keep ourselves, how to get

10-14 shopping items, cooking, prepare eg: Sinhala - household work. (4)

10-14 - Later treatment to others

10-14 Both

garden / how to do farming.

14-18 - Scholarship and tuition, how father

learn from school.

5-10 - walk in good and bad.

5-18 - learn to be a part of the school

(2) community to be friendly - there

are many children here.

5-10 - learn how to how to be a

	Behaviour in the community (?)	- preparation for exams - different types of expression
	getting like the sociedade outside school	Why is this important?
10-14	- learn to work in groups	Behaviour becomes first everywhere because we have to learn how to behave.
5-10	- how to stay clean	
5-10	- letters (alphabet) sounds. - reading (1) and writing (learn what to behave	How do we learn how to behave well ?
	learn from community	
10-14 up18 (1)	- how to behave in the community	- watch how parents and elders behave
10-18+ up18 (2)	- try to understand different people in the community.	
(3) 5-10	- people in community may be doing wrong things like stealing but we learn not to do such things. we also not to take liquor or drugs, or cigarettes	Learn from mother how to do housework work - we watch how our mother works. We can ask from our parents and learn. Must think about the society and also engage in the society, then only you can learn.
5-10	& also that languages and not to use bad things	
	learn from friends	
10-14 (1)	- what is good and what is bad	Reading and writing is the first one we learn from school. Everywhere we need education.
5-10 (1)	- how to be friendly with others.	
10-14 (3)	- learning to win and lose in games.	

Translator Transcript 2 — **14 year old boys attending school, rural Sri Lanka**
9th March 2004

P. You can't talk freely.
K. The main actors are you all.
it entirely depends on you.
K I said that Miss madam is still
studying. Likewise we also study.
P- K When do we start studying? - When?
C. From the day we are born
K. Rpt. do it correct?
Till when?
C Until we die
K Rpt. - We study various things. but
We study from birth until death.
From where do we learn these?
C. From society.
K. Rpt from people
C ~~From~~ At home and at school.
K Rpt.
C From nature. From whom else?
K Rpt. From other else.
C. Priest in the temples.
P. laughter.
K. We can also study from friends.
in school.
and neighbourhood.
Good - We mainly study at home,
school, society and friends.
P .
K We will see what we learn from
each & what places.
K. You said that we learn from 'love'.
later do we learn at home? You can say
C. To speak.
K Rpt - We learn a lot of things. We
will see what are the important things
learnt
C Good and Bad

K Natural elem?
C Habits -
L. When you first come Nat.
C. Reproducing selves.
L Ppt. - when you talk to them you
speak with respect.
P. . .
R Behaviour.
L. Ppt.
P.
C. How to eat and drink
L. Ppt. What else?
P. -
C. We learn from texts and written.
L. What do we learn?
C Embracing ourselves in a proper
Place.
K. Ppt - What do we learn from texts?
Things days - in other ordinary different
Don't Nat anything to learn?
From write ? What do we learn
from write ?
P.
C Help in home work.
L. Home work. What type of work we.
C Go to the bathroom.
Sweep the house.
P. From texts ?
C. Work in the garden
R Ppt:
C. Cultivation.
L. Ppt. What type of cultivate ?
What else? Skills may be Family
special abilities.
C Weaving - Carpentry.
L Ppt.
P. Carpenter.
How can I learn carpentry and
weaving from texts.

K. Are there people who have learnt?
P. Good – we will see what is relevant in what
C. To go on a good path
K. Ept.
C. To help teachers.
K Ept
P. What do you say.
K. To go on a good path.
P. Learning in the school.
C. To be a good child.
K. Ept.
P. To identify ourselves.
C What do we learn?
K To be together.
C. Family.
K
P.
C To behave in society.
P. They learn how to.
K. What else? When you come to school.
C. An smaller classes.
C To work in groups.
K. What do we learn?
C To work in a group.
K. Ept. What else? Things – what else?
What did you learn after when you
come to school.
C. To be clean.
K. Ept. But if there is more impact by
C. Education
K. When you say education – what?
C To gain knowledge.
K Is that? What you say is correct.
The word does not come.
C from books.
K Not from books.
C. The syllabus.
K Hard – In what what do you learn?

C Good and bad.
K In books - do you get good and bad.
Ymamid - Did you know where you don't study? Education. Yes. What do we learn first?
C. Letter -
K. Apt. Ymamid at the beginning also, we learn letter.
P. Right -
K. Listen -
C. To read.
K To read and write. When you finish what else? You know - not just read say. What can you learn in the society?
P. Remember 'And say
K What do we learn from the society?
C Behaving in the society.
K Apt.
P. -
K.
P. Behaviour to refuse
K. You know - you're telling say, you will not go wrong -
P. It doesn't matter often if you are wrong
K. Respect.
K. Apt. - Advice and guidance.
C. We learn from teacher.
K. Apt. What do we learn?
C. They teach us what they know
P From where - school or society.
K. Apart from that - what else -
P Society.
K. Organising in different ways.
P. They say
K. What else?
C Not to steal.
K - Apt.
C Behaviour

K. What do we learn?
C Learning good things.
K. If you say good and bad.
P. Identify good and bad
K. Something. things. Adhere to good - Give up bad.
What else? From society.
Society is - when you go out - you are not at home. Are you?
C. Practice and learn what you learnt.
K. Ok. What type of things?
C. From home and from home - we take it society.
K. Yes. - they are also in the society.
P. Relinally . . .
Y. Yeah!
P. Give an example. We learn from society what we cannot learn at home and at school - Example? What type of a thing
K Think about.
P. Anyway not done across other at school.
K. It is not such a problem. There are things you know.
C. You hear bad words - .
P. . . .
K. Bad words.
P. Not of home - - .
Y Yeah!
K. From friends - what do you learn?
C. Good and bads.
R. Ok.
C. Friendship.
K Ok.
P. . . . what else from friends?

E. We ask for books from friends
K. When we get together with friends and do certain things — what things can you learn?
P. Do with a friend.
C. Be together
K. What do you do?
C Play.
K After the end of it?
C We share.
K That is if you win - what happens if you lose?
C.
P.
K. You should have the ability to share victory and defeat. Do we?
- You learn from friends.
With younger brother and sister.
P.
K. Like that you can learn from the society
E. Good - we have written a number of things. Out of these what are the most important?
P.
C. Respecting elders
K Rpt.
C. Behaviour.
K Rpt. There are two - what is more important. Both are important.
C. Behaviour is more important
K Rpt.
C. Respecting elders.
K You say behaviour is the most important but they like do you say so? Why is it important?
F.
K Say.
C. Go to some place and behave.
K Rpt. Some more!

SL 8

Annex 11 Coding Procedure and Coding Categories

The data from the focus group discussions was entered into Excel Spreadsheets ensuring that each informant was cross-referenced using group references to link parent groups and child groups. Though there were many comments which were coded to individuals it was generally not possible to cross-reference each individual comment as the nature of the focus group discussion resulted in several comments from different individuals in response to each discussion point. The data was analysed in the following stages:

Data Analysis Stage 1: all data for each discussion group entered into an excel spreadsheet with one column for each question or sub question, one cell for each discussion point and as many rows as required to complete the entry of all comments for each question. Actual data is too extensive to illustrate the matrices clearly in this annex but a section of one spreadsheet is inserted below.

Group	Parents of	Informants	School attended	Rural / urban	grade	Qu. What is important for children to learn in your village	Qu. What skills do mothers have?	Qu. What do mothers / fathers do?
Main Group 20	Grp 19	mother/ father	b/g attending NFE	rural	NFE	They make the children work in the vacations	All mothers weaved using sheep wool before	All involved in potato harvest
Main Group 20	Grp 19	mother/ father	b/g attending NFE	rural	NFE	milking the cows	they didn't teach the daughters	One DCM truckfrom each house is sent to Phuntsoling
Main Group 20	Grp 19	mother/ father	b/g attending NFE	rural	NFE	otherwise when they go back to the village it is very awkward for them to do anything	change came with the introduction of potato farming	All the food - sugar, rice - is brought from Phuntsoling
Main Group 20	Grp 19	mother/ father	b/g attending NFE	rural	NFE	even to do the cooking it is difficult	Then no time for weaving	They can buy everything for the year but cannot save any money
Main Group 20	Grp 19	mother/ father	b/g attending NFE	rural	NFE			Before there were no potatoes and no road
Main Group 20	Grp 19	mother/ father	b/g attending NFE	rural	NFE			They sold potatoes by walking two nights in the mountains

Data Analysis Stage 2: When all the data was entered in its raw form under each sub-question a complete review of all responses was made to identify any comments relating to learning outcomes valued by informants and these were then copied into another spreadsheet along with the key informant references for each comment (rural/urban, boy/girl/parent, attender/non-attender, grade) to enable disaggregation of the responses.

Each comment was categorised, initially selecting an appropriate general descriptor. The researcher had been present throughout all focus group discussions and therefore could contextualise even brief comments. The first categorisation of Sri Lanka data produced the coding categories listed in Table 21. A similar procedure with the Bhutan data produced the coding categories listed in Table 22.

Data Analysis Stage 3: The Sri Lanka and Bhutan categories were further scrutinised and reorganised through discussion with other researchers in student discussion forums at the Institute of Education, University of London (December 2004, Poster Conference) and St Edmunds College, Cambridge (March 2005), and through intensive discussion with the PhD supervisor. After a number of iterations of re-grouping of code categories, the reorganised categories were finally consolidated into the list given in Table 23.

Data Analysis Stage 4: The consolidated categories were finally formulated into four generic dimensions of valued learning as presented in Chapter 8, after thorough discussion and drafting with guidance and advice from the PhD supervisor and through presentation of a research paper at the Human Development and Capability Approach annual conference (Groningen, Netherlands - September 2006).

Data Analysis Stage 5: In parallel with the development of the categories and dimensions of valued learning outcome, the data was also analysed to identify patterns in aspirations of children and their parents by simply grouping responses with key informant references (rural/urban, boy/girl/parent, attender/non-attender, grade) used to enable disaggregation of the responses. This was reported in Chapter 7. Similarly, analysis of child and parent responses to the questions on (i) opportunities open to learners according to level of qualification achieved, (ii) learning which takes place in the home, in the community, in the school and with friends, and (iii) skills of people in the village including parents were also made by grouping and disaggregating the data to identify patterns. This information was used variously in Chapters 5 and 6 to identify informants level of awareness of learning opportunities as a basic capability, their range of choice and diversity in learning outcome, and the conversion factors of learning to improved quality of life of individuals.

Data Analysis Stage 6: in parallel with the above stages of analysis, the stories of individuals were selected from the descriptive data to provide profiles of learning illustrative of certain learner types. These profiles were used in Chapters 5 and 6 to contextualise some of the elements of the capability approach and more broadly to consider how to evaluate the influence of social policy and individual entitlement on

learning outcomes.

The data is stored in excel spreadsheets which are available for closer scrutiny and further analysis and coding if required in the future.

Table 21. Valued Learning Outcomes Coding Categories Sri Lanka Data Analysis Stage

Listening Skills
Acceptable Behaviour
Obedience
Participatory Sports / Arts
Learning Skills
Respecting Others / Showing Respect
Cooperation / Helping Others
Caring For Others / Loving Family And Friends
Community Assistance / Community Work
Moral Education – Knowing Good From Bad
Learning To Live In Harmony With Others
Health Skills / Healthy Living
Home Making Skills
Participation In Community
Livelihood Skills
Literacy
Numeracy
Setting An Example To Others
Character Development
Memory Training
Environmental Awareness

Table 22. Valued Learning Outcomes Coding Categories

Bhutan Data Analysis Stage

1	Local Crafts	2	People	3	Farming	4	Development	5	Home	6	Literacy / Learning
1.11	Bamboo	2.11	Care	3.11	Cattle	4.11	Change	5.11	Cleaning	6.11	Communicate
1.12	Carpentry	2.12	Cooperate	3.12	Poultry	4.12	New tech	5.12	Cooking	6.12	Language
1.13	Carving	2.13	Respect	3.13	Sheep	4.13	Driving	5.13	Fire	6.13	Literacy
1.14	Crafts	2.14	Character	3.14	Milk	4.14	Electrical	5.14	Firewood	6.14	Study
1.15	Painting			3.21	Crops	4.15	Gas agent project	5.15	Food	6.15	Numeracy
1.16	Sewing	2.21	Culture	3.22	Potato	4.16	Mechanic	5.16	housework	6.16	Meetings
1.17	Shoemaking	2.22	Religion	3.23	Paddy			5.17	Laundry	6.17	Memory
				3.24	Wheat	4.21	Income	5.18	Washing up		
1.21	Knitting	2.31	Dance	3.25	Vegetable	4.22	Jobs	5.19	Water		
1.22	Weaving	2.32	Music	3.26	Fertiliser	4.23	Market				
		2.33	Songs	3.27	Manure	4.24	Shop				
1.31	Construction	2.34	Drama	3.28	Plough	4.25	Shopping				
1.32	Mason					4.26	Savings				
1.33	Drainage	2.41	Discipline	3.31	Farm						
		2.42	Rules	3.32	Farmer training						
		2.43	Behave	3.33	Garden	4.31	Travel				
		2.44	Moral	3.34	Flowers	4.32	Bicycle				
				3.35	Local skills						
		2.51	Roaming	3.36	Tea estate work	4.41	Health				
		2.52	Sports								
		2.53	Games	3.41	Local environment						
		2.54	Play								

Table 23. Defined Generic Dimensions and Sub-Categories of Valued Learning Coding Categories - Consolidated

1 LIVELIHOODS
1.1 Farming
Animal Husbandry
1.11 cattle
1.12 poultry
1.13 sheep
1.14 milk

1.2 Farming
Growing Crops
1.21 crops
1.22 potato
1.23 paddy
1.24 wheat
1.25 vegetable
1.26 fertiliser
1.27 compost
1.28 plough

1.3 Training
1.31 farmer training

1.4 Market Gardening
1.41 gardening
1.42 flower cultivation

1.5 Contract Labour
1.51 tea estate work

1.6 Crafts
1.61 bamboo
1.62 carpentry
1.63 carving
1.64 painting
1.65 shoemaking
1.66 weaving
1.67 sewing

1.7 Technical Skills
1.71 construction
1.72 mason
1.73 drainage
1.74 electrical

1.8 Income
1.81 terms and conditions
1.82 running a business
1.83 running a shop
1.84 market buying / selling

1.9 Jobs - General
1.91 job application
1.92 following instructions

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2 SOCIAL RELATIONS
2.1 Interpersonal Skills
2.11 character building

2.2 Social Responsibility
2.21 care
2.22 cooperation
2.23 respect

2.3 Socially Acceptable Behaviour
2.31 behave
2.32 moral
2.33 rules
2.34 discipline

2.4 Cultural Norms
2.41 culture
2.42 religion

2.5 Participatory Arts
2.51 dance
2.52 music
2.53 songs
2.54 drama

2.6 Participatory Sports
2.61 sports
2.62 games
2.63 play

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3 SOCIAL CHANGE
3.1 Different Horizons / World Views
3.11 travel / roaming
3.12 road safety

3.2 Technological Change
3.21 new technologies
3.22 solar power
3.23 gas agent project
3.24 computer

3.3 Transportation
3.31 driving
3.32 mechanic
3.33 bicycle

3.4 Health
3.41 hygiene
3.42 family health
3.43 medicine

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4 HOUSEHOLD MANAGEMENT
4.1 Household Chores
4.11 cleaning
4.12 cooking
4.13 fire
4.14 firewood
4.15 food
4.16 laundry
4.17 fetching water

4.2 Home Maintenance
4.21 construction
4.22 mason
4.23 drainage
4.24 electrical
4.25 bamboo
4.26 carpentry
4.27 wood carving

4.3 Clothes
4.31 knitting
4.32 weaving
4.33 sewing

4.4 Financial Management
4.41 market
4.43 shopping
4.44 savings

4.5 Family Health
4.51 hygiene
4.52 family health
4.53 medicine
4.54 first aid

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5 FORMAL LEARNING
5.1 Communication Skills
5.11 listening skills
5.12 language
5.13 literacy
5.14 cultural tradition

5.2 Study Skills
5.21 memorisation
5.22 examination skills

5.3 Numeracy Skills

5.4 Information Exchange
5.41 meetings
5.42 career guidance

5.5 Continuing Education
5.51 technical training
5.52 special educational needs
5.53 access to school
5.54 access to NFE

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6 SOCIAL ORGANISATION (community, government, other societies)
6.1 Care of Environment
6.11 local environment
6.12 sustainability

6.2 Participation
6.21 meetings
6.22 community work

6.3 Representation
6.31 village management
6.32 school committee

6.4 Rights and Exploitation
6.41 rights at work
6.42 access to information

Annex 12 Information Letter to Participants

The letter below, translated into local language, was circulated to all parents of children invited to participate in the study in Sri Lanka and Bhutan. The District Education Director and the village headman in Bhutan endorsed the parental consent form on behalf of any parents who would be unable to read the information letter.

Participant Information Sheet

I am a teacher from England. My name is Marion Young. I have worked in Bhutan on education projects for the past eight years. Now I am undertaking some research in Bhutan, to try to gain a better understanding of what people think it is important for children to know and to be able to do as a basic preparation for life.

When I visit your community I will be working with two Bhutanese. One of them will lead discussions and some other activities with groups of 14 year old children, with small groups of parents from your community and with some community leaders. They will be able to speak in Dzongkha so that translations will not be necessary and it will be easier for people to discuss freely and with understanding. The second person will be my translator who will sit beside me and explain to me what is being said in the discussions, in English.

We will use tape recorders to record all the discussions so that I can listen to the discussions again later. In this way I will really be able to have a better understanding of the ideas which you share with us.

We will spend about one week in the village meeting different groups of 14 year old children and also meeting the parents of those children to hear their views too. We will also meet some of the people who work with you in the village, like the health worker or the Lama as they will have some interesting ideas to share with us. We will spend about 2 hours asking some questions, listening to your ideas and doing some activities with each group.

I have been given approval to visit your community by the Education Minister. The District Education Officer has helped to make the arrangements for my visit. I will share a summary of findings with the District Education office as they may find the information useful in their work. No names of individuals, or their specific responses, will be disclosed to anyone. All the information which is provided to me during my visit to your community and through discussion and activities with groups of people from your community will be kept completely confidential.

You are free to participate in the discussions and activities or to withdraw if you would prefer not to participate.

I very much appreciate your help in giving me some of your valuable time and by sharing your thoughts and ideas with me about what is important and valuable for children to learn. I hope that my work will make a contribution to an improved future for the children of today who will be the adults of tomorrow.

Thank you.

Parental Consent Form

I, ... as the mother / father of ..... agree to allow my son / daughter to participate in the research activities which Marion Young and her colleagues are undertaking in our village.

I have read and understood the information sheet provided by Marion Young.

Signed: .....
Village: .....
Date: .....

Participant Information Sheet – Dzongkha Text for Bhutanese informants

རང་གི་ངོ་སྤྲོད་གནས་བསྡུས།
རེ་གི་མིང་ མེ་རི་ཡོན་ཡང་ཨིན། ངར་ཨིང་ལྷན་ཀི་ཡས་སྤོ་བ་དཔོན་ཅིག་ཨིན། ཏེ་མ་ང་ འབྲུག་ཤེས་རིག་ལས་ཁུངས་ནང་གི་ ལས་འགུལ་ཅིག་ནང་ ལོ་ངོ་བརྒྱད་ལྷ་ཤའད་ཡི། དཔྱོ་ དའབྲུག་ལུ་ ང་བཅས་ཀྱིས་ཨ་ལུ་ཆུ་གི་མི་ཆ་གི་དཔྱ་ལུག་ཅི་ར་ང་ ཏ་གོ་དགོ་པ་གལ་ཆེཔ་འདུག་ག་དང་ གཅི་རང་བབ་ཆུགས་དགོ་པའདུག་ག ལེགས་ཤེམ་བབད་ཏ་གོ་ཐབས་ལུ ཞིབ་ཆ་ཚོ་པ་ འབད་ཐའི་བསྟངཔ་ཨིན། ངར་ ཞྭད་ཀྱི་མི་སྡེ་ནང་འོངམ་དང་ འབྲུག་པ་གཅིག་དང་གཅིག་ཁར་བཟོན་འོང། འབྲུག་པ་གཅིག་གིས་ཞྭད་དེ་ ལོ་ངོ་ ༡༥ ལང་ཡོད་པའི་ཨ་ལུ་སྡེ་ཚན་ཆུ་དང་ ཐམའི་སྡེ་ཚན་ དེ་ལས་ མི་སྡེའི་འགོ་དཔོན་དཔོན་དག་པ་ཅིག་དང་ གཅིག་ཁར་ཁ་སྐྱབ་ནི་ཨིན། ཁོ་གིས་ རྩོང་ཁ་ཤེས་པའི་སྐབས་ དེ་ཡང་ མི་སྡེའི་འགོ་དཔོན་དཔོན་དག་པ་ཅིག་དང་ མི་ཆུ་དང་གཅིག་ཁར་ ག་དག་ཤ་སྟེ་ ཐོག་ཆག་མེད་པར་ཁ་སྐྱབ་ནི་དང་ཏ་ཆུགས་ནི་ཞེན་ལུ་ཨིན། གཞན་མི་ཅིག་ཡོད། ངར་ཏ་ཆུགས་ཁ་ཐུབ་ཡང་ ཁ་སྐྱབ་པའི་ཐོག་ལས་དང་ སྡེ་ཚན་ནང་ལྷ་འབད་དེ་སྐྱབ་དགོ་པ་ཨིན། ཁ་སྐྱབ་པའི་སྐབས་ལུ་ རྒྱ་ཆུ་གར་ཀུལ་ལས་ཡོག་སྟེ་ཨ་ནི་གི་དོན་ལུ་ སྐྱ་འགོར་ནང་བརྒྱལ་སྟེ་བཞག་ནི་ཨིན། དེ་སྟེ་འབད་བ་ཅིན་ ཞྭད་ཀྱིས་ངལ་སྐྱེལ་ཆུ་གར་ ཏ་གོ་ཆུགས་ནི་ཨིན་པས། ངའཅས་ཆ་ཞུབ་ གཡུས་གལ་ལུ་ ལོ་ངོ་ ༡༥ ལང་ཡོད་མི་ཟ་ལུ་སྟེ་ཚན་ཆུ་དང་ ཁོང་གི་ཐམ་ཆུ་གིས་མཆོ་གཙང་མ་ཤུ་ཚམ་ཞིག་ ཏ་གོ་ཐབས་ལུ བདུན་ཕྲག་གཅིག་གི་རིང་སྟོངས་ནི་ཨིན། འདི་མ་ཚད་ ངའཅས་ཀྱིས་ ཞྭད་ཀྱི་ཐབས་གཡོག་ཅ་ཆས་ཀྱང་ བཏུབ་ཚཞབ་དང་གཅིག་ཁར་ ལྷ་གིའཁེལ་བ་ཡོད་མི་ གསོ་བའི་ལས་གཡོག་ཆུང་ཆུང་ཨིན། ངའཅས་ཆ་ཞུབ་ཞྭད་ཀྱི་ལས་ཀ་ ཤུལ་ཁར་ ཁ་ཤས་ཀྱིས་ ཁ་ཤས་ཀྱི་ཐབས་ལུ་ ཏ་ཡོན་ཏེ་ཡོད་ཅིང

Participant Information Sheet – Sinhala Text for Sri Lankan informants

සහභාගිවන්නන් සඳහා තොරතුරු පත්‍රිකාව

ආයුබෝවන්

මම එංගලන්තයෙන් පැමිණි ගුරුවරියක්. මගේ නම මේරියන් යංග්. පසුගිය අවුරුදු දෙකේ දී මම ශ්‍රී ලංකාවේ ගුරු පුහුණු වැඩසටහනක වැඩ කර තිබෙනවා. දැනට ශ්‍රී ලංකාවේ ද අවුරුද්ද අන්තිමට බූතානයේ ද මම පර්යේෂණයක යෙදෙනවා. එම පර්යේෂණය කරන්නේ දරුවන් දැන ගත යුතු වැදගත් දේ මොනවා ද කියලත් දරුවන්ගේ ජීවිතයට මුල් සූදානමක් ලෙස කළ හැකි දේ මොනවා ද කියලත් යම් යම් අය සිතන දේ ගැන වැටහීමක් ලබා ගන්න යි.

මම ශ්‍රී ලංකාවේ දෙදෙනකු සමඟ ඔබේ ගම් පළාතට පැමිණ වැඩ කරනවා. ඔවුන්ගෙන් එක් කෙනකු අවුරුදු 14 වයසේ දරුවන් කණ්ඩායම් සමඟ ද දෙමව්පියන්ගේ කුඩා කණ්ඩායම් සමඟ ද ප්‍රජා නායකයන් සමඟ ද ක්‍රියාකාරකම් කිහිපයක් කරමින් සාකච්ඡා පවත්වනවා. සිංහලෙන් හරි දෙමළෙන් හරි කථා කරන්න පුළුවන්. පරිවර්තනය අවශ්‍ය නෑ. එමනිසා නිදහසේ හා තේරුම් ඇති ව සාකච්ඡා කරන්න පහසු යි. මා සමඟ පැමිණෙන අනෙක් කෙනා මා ළඟ වාඩි වී සාකච්ඡා කරන විට කියන දේ මා වෙනුවෙන් ඉංග්‍රීසියට පෙරළනවා.

සාකච්ඡාවලට නැවත වරක් ඇහුම්කන් දෙන්න මට පුළුවන් වෙන විදියට හැම සාකච්ඡාවක් ම පටිගත කරන්න ටේප් රෙකෝඩරයක් ගෙනෙනවා. මේ ක්‍රමයෙන් ඔබ කියන දේ මට වඩා හොඳින් තේරුම් ගන්න පුළුවන්.

අවුරුදු 14 වයසේ වෙන වෙන දරුවන් කණ්ඩායම් ද අදහස් දැන ගන්න එම දරුවන්ගේ දෙමව්පියන් ද හමු වෙමින් දවස් හයක් විතර අපි ගමේ නතර වී සිටිනවා. අපට වැදගත් අදහස් ලබා දෙන්න පුළුවන් සෞඛ්‍ය සේවක, පන්සලේ හාමුදුරුවෝ හා ගමේ සමාජ කටයුතු කරන පුද්ගලයන් කිහිප දෙනෙක් ද අපි හමු වෙනවා. ප්‍රශ්න අසමින් ඔවුන්ගේ අදහස්වලට ඇහුම් කන් දෙමින් එක් එක් කණ්ඩායම සමඟ ක්‍රියාකාරකම් කිහිපයක් කරමින් අපි පැය දෙකක් පමණ ගත කරනවා.

ඔබේ ගම් පළාතට පැමිණීම සඳහා පළාත් අධ්‍යාපන කාර්යාලයෙන් මට අවසර ලැබී තිබෙනවා. කටයුතු සූදානම් කිරීම සඳහා ප්‍රාදේශීය ලේකම් මට උදව් කරනවා. රාජකාරී වැඩට ප්‍රයෝජනවත් වෙන්න පුළුවන් නිසා දිස්ත්‍රික් අධ්‍යාපන කාර්යාලයට මා යොයා ගන්නා දේ පිළිබඳ සාරාංශයක් ලබා දෙනවා.

පුද්ගලයන්ගේ නම් ගම් වත් ඒ අය සපයන පිළිතුරු වත් කිසිවකුට හෙළිදරව් කරන්නේ නෑ. ඔබේ ගම් පළාතට පැමිණ කරන සාකච්ඡාවලින් හා ඔබේ ප්‍රජාවේ පුද්ගල කණ්ඩායම් සමඟ කරන ක්‍රියාකාරකම්වලින් ලැබෙන හැම තොරතුරක් ම සම්පූර්ණයෙන් ම රහසිගත ව තබා ගන්නවා.

සාකච්ඡාවලට හා ක්‍රියාකාරකම්වලට එකතු වෙන්නත් එයින් එකතුවෙන්න බැරි නම් ඉවත් වෙන්නත් ඔබට නිදහස තිබෙනවා. දරුවන්ට ඉගෙන ගන්න වැදගත් හා වටිනා දේ පිළිබඳ ඔබ සිතන දේ හා ඔබේ අදහස් මා සමඟ බෙදා හදා ගන්න ඔබේ වටිනා කාලය ලබා දී උදව් කිරීම මම බොහෝ අගය කරනවා. හෙට වැඩිහිටියන් වන අද දරුවන්ට හොඳ අනාගතයක් ලබා දීම සඳහා මා කරන දේ හේතුකාරක වේ යයි මම බලාපොරොත්තු වෙනවා.

ස්තුතියි.

Annex 13 Debriefing Summary to the Education Minister of Bhutan

Letter submitted to the Education Minister, Royal Government of Bhutan at the conclusion of the data collection phase:

Report of the PhD Research Field Work undertaken by Marion Young Bhutan, October 2004

Topic: Local Perspectives on Valued Learning Outcomes and Capabilities
University of London, Institute of Education

I am grateful to the Royal Government of Bhutan, Ministry of Education, for granting approval to enable me to undertake my PhD field research in Bhutan in October 2004. With the assistance and advice of the Director, Department of School Education, Thimphu and the District Education Officer, Wangdue Phodrang I was able to visit three schools, Nobding Lower Secondary School, Phobjikha Primary School and Rameychen Community Primary School. In addition I met students and their parents from Drang NFE, Zeelam NFE and ZiZi NFE classes. During my two week stay in the Phobjikha and Rameychen villages I had the opportunity to meet the Gup of Dangchu, the Chimi of Phobjikha, the RSPN project officer, the forestry and livestock officers of Phobjikha RNR centre, the Basic Health Worker from the Phobjikha BHU, the Zeelam NFE instructor, teachers and head teachers from all sample schools. I also met with a small sample of children and parents from Zilukha Lower Secondary School, Thimphu, as an urban comparison. The main sample of informants were 14 year old children and their parents, including children attending school and those out of school.

Table 1a. Main Sample: Primary Informant Groups

		Attending school – 14 yrs old in 2004			Not attending school 12-16 yrs old in 2004		
			Mothers of sample	Fathers of sample		Mothers of sample	Fathers of sample
School 1 - rural	Boys	6	2	1	3	1	1
	Girls	6	3	-	3	3	-
School 2 - rural	Boys	6	1	-	-		
	Girls	6	1	-	1		
School 3 - rural	Boys	8	2	1	-		
	Girls	9	6	1	4		
School 4 - urban	Boys	7	2	1			
	Girls	5	1	-			
NFE 1 - rural	Boys				2	1	-
	Girls				3	2	1
NFE 2 - rural	Boys				1	-	-
	Girls				4	4	1
TOTAL	Boys	27	7	3	6	2	1
	Girls	26	11	1	15	9	2
TOTAL		53	18	4	21	11	3

Table 1b. Main Sample: Secondary Informant Groups

I.	Four Head Teachers	II.	District Education Officer
III.	School Caretaker (knowledgeably skilled/uneducated)	IV.	Basic Health Worker
V.	Two teachers originating from the locality	VI.	Local NGO Officer
VII.	Three Local Religious Leaders	VIII.	Livestock and Forestry Officers
XI.	Locally elected representative in National Assembly	X.	NFE Instructor
XI.	Education Planning Officer	XII	Minister of Education

Initial Observations from the Field Work

At this stage it is too soon to draw any conclusions from the field work data analysis. However, in order to provide the Education Ministry with some feedback from my field work visits I have reflected on some of the emerging issues I observed which I hope will be useful and informative.

1. Local skills and practices: the research explores local skills and knowledge which are important to rural livelihoods and to survival in a subsistence economy. There is a danger that school children lose some of the skills and knowledge which would earlier have been passed through intergenerational transfer especially when schooling takes them away from their home environment. Many Bhutanese children from rural communities such as those in the research sample continue to learn the basic livelihood skills of their home during winter vacations and many are confident that they would be able to return to their home and have the skills to survive and work on the land. The negative feeling expressed by children towards this as an undesirable option for their future was counterbalanced by the research team through some discussion on the value and importance of working within the rural economy and the value of being an educated farmer with, potentially, a good income. It would seem that the concept of educated farmer is yet to be realised in rural communities in Bhutan. The present trend is for rural children to move away from home for completion of their basic education to Grade 10 and above, and they do not return to work in the village. An anticipated improvement in living standard is the main driving force behind this trend. However, in future the under-employment situation in Bhutan may persuade some young people to reconsider the rural livelihood option.

2. Parents education: Many uneducated (unschooled) parents interviewed during the research field work considered that they were unskilled (in their words "stupid people") and unable to help to educate their children, despite being able to demonstrate though discussion that they have a wide range of important skills and knowledge which have ensured their survival in a harsh rural environment through generations. Several groups of mothers explained that they do not know what their children are learning at school as they are uneducated and so cannot talk with their children about the school work. The inference is that this perception causes a divide between the child's home and school life including the potential for young people to undervalue the skills and knowledge of their home and the village. The school can take action to build bridges for example by encouraging children to share with their parents some information about what they are learning at school and to encourage children to value the skills and knowledge of their parents and of village people. Urban unschooled parents also seemed to have little involvement in their children's school learning as their lack of literacy was seen as a

barrier. They were however very concerned about the general development and future opportunities for their children.

3. Changes in the rural landscape and rural livelihoods: Most notably, potato growing as a cash crop has superseded traditional buckwheat and barley cultivation in the sample rural community and this has impacted on the rural way of life within one generation. Road construction has enabled farmers to move their potato crop to markets more easily and to bring back supplies in exchange for their potato sales. Though subsistence farming has been replaced in part by the potato crop people indicated that they generally have little from the potato revenue to put aside for saving. The cash is used to buy supplies for the year including salt, oil, rice and cloth. Some aspects of the subsistence lifestyle continue including butter and cheese production, kitchen gardening, bamboo and wood products for household use (fencing, baskets, containers, etc), weaving using sheep wool to make blankets, clothes and hats, traditional medicine and religious practices, and traditional house construction. There still continues a strong community spirit of cooperation especially in the form of community labour contribution for construction of the road, Basic Health facilities and community school facilities. How do these changes affect education and learning outcomes for young people?
(i) Mothers informed us that in the past their mother wove cloth using sheep wool which was time consuming and that mothers now either weave using imported thread or have lost the skill of weaving due to lack of time with potato growing. Many of the younger generation of school girls said they would like to learn the skill of weaving. Women who were still weaving were able to earn a steady income to supplement their basic income.
(ii) Potato growing is labour intensive at certain times of the year and so children are needed to help with the work or if children are away at school the family has to hire labourers who are likely to have to be paid in kind – reciprocal assistance or a share of the crop.

4. Rural-Urban Differences: One major difference between rural living and urban living may be observed in the level of community participation and cooperation to bring about improvements in living standards. Low cost, labour intensive solutions to some of the rural community developments have been made through community labour contribution and village community funds. Two other notable rural-urban differences which directly affect children's learning are (i) exposure to new technologies and (ii) out of school past-times.
(i) many of the rural children had no exposure to computers, TV and video, and telephones which urban children now take for granted. For some rural children technologies are something which they can only read about in books. Solar power and vehicle engines are two new technologies which are accessible in rural communities.
(ii) as has long been the tradition, rural children help the family during out-of-school times with specific tasks around the house and farm which are age related and which are a part of the traditional apprenticeship into rural livelihood knowledge and skills. These tasks are a necessary and time consuming part of rural living. In urban areas children do not have the same out-of-school responsibilities and their time is free. There are more distractions and potential trouble spots for urban children. Parents are aware of this and face difficulties in knowing how to control their children.

5. Range of opportunities for education and employment – awareness and reality: Globally the tendency is for schooling to emphasise a linear progression through grades towards training and employment opportunities. In Bhutan these opportunities are at present only available to a minority of school completers. One observation of note is that many parents and children in the sample group would naturally like the outcome of education to be financially rewarding in terms of employment opportunities but few of them are really informed of the opportunities available. Furthermore, there are a range of opportunities available for training and skills enhancement which may be undervalued or

underexploited but which can have a significant impact on the lives of those in rural communities. For example the RSPN programme in Phobjikha has provided training in weaving skills, solar power maintenance, local community fund management, etc. Some rural people seemed unaware of the learning opportunities which come for example from the Basic Health Unit and from the RNR centre and which are very directly related to the daily lives of the community. One of the government officers in the valley made a significant comment by stating that people must be made aware of the opportunities which are available to them within their own communities, for example the potential of tourism and the markets which could be found for traditional products. There was a suggestion that some communities have more of a tendency towards entrepreneurship than others.

6. Evaluation of learning outcomes: Education and learning cannot be evaluated without some consideration of the context in which children are growing up. A measure of education achievement of children in an urban area does not unconditionally and equitably transfer to measure children's achievement in very rural areas. School examinations measure children's academic achievement in basic literacy, numeracy and school subjects. Broader skills and knowledge learned in the home and in the community provide a practical and relevant preparation for life for children and this preparation contributes to their capability to improve their lives. The research findings are being used to identify opportunities and vulnerabilities which affect children's learning outcomes and which therefore affect their capabilities to improve their lives. Some of the factors identified from the research so far are summarised below:

	Factors which Enhance Capabilities OPPORTUNITIES	Factors which Restrict Capabilities VULNERABILITIES
Cost of education	• Parents commitment to meeting costs • Parents/children's assessment of short term costs vs long term gains	• Labour needs at home • Limited economic means of the family • Distance to transfer to next level up
Functional Education	• Practical application of learning eg. farming / livelihood skills and knowledge • Functional literacy and numeracy achieved • Bilingual communication skills	• Learning not relevant or applicable to everyday living • Functional literacy/numeracy not achieved/maintained eg no access to reading materials • Different home/school languages
Information Systems	• Careers advice and guidance • Information and learning networks • Tracking children between and beyond formal schooling • Life skills (health, livelihoods, etc) and technology information	• Lack of access to information and information networks • Lack of reliable education and development data • Under-valued life skills and local technologies
Education Opportunity	• Choice of education / career pathways • Broad range of learning options according to interests • Re-entry opportunities at a later stage (readiness / relevance)	• Learning separated from daily life activities and adult communities • Lack of information and advice on range of opportunities • Lack of awareness of opportunity for life long learning
Parent/Family Situation	• Interest in / involvement in children's education • Support from extended family • Parents level of literacy and livelihood skills	• Economic and educational circumstances of the family • Social vulnerability of the family • Responsibilities placed on child which impact on learning • Level of protection from abuse and exploitation
Livelihoods and Education	• Availability of tools, resources, access to markets • Transfer of technical-vocational skills and knowledge • Opportunities to upgrade skills • Access to new developments	• Lack of information including rights eg. through illiteracy • Financial insecurity eg. through lack of numeracy skills • Lack of community cooperation

Annex 14 Anonymity Coding in Scripts

Examples of coding of scripts with anonymity references

Sri Lanka Practice II - Responses from mothers of 14 yr old boys attending school

In what ways can mother and father be involved in their child's education?

(17) Father provides the finances for his (the child's) education.
I (Mother) check the work in the school books and give help where I can (has had education up to O level). I help with maths or send to a neighbours child who is in a higher class. After finishing school work the child does work in the farm or home.

(15) Father is not so interested in helping. It is I (mother) who guides children and supplies everything including money. The child is afraid to ask for money from the father as he will scold and say it is only going to be spent on sweets. Only mothers visit the school.
I earn more than my husband. Sometimes my husband helps a little with school work as he has some education – I don't have education but I earn more.

(14) There was a problem with the house which collapsed due to the rains so the family has to live together in one room and the child goes to a neighbour to study as we have no electricity in the house and no space for him to study. My husband is not much interested in the child's education. I take the whole weight of the child's education. My husband does not work much because of a back injury. The third child (girl) has fits and has to go to Nuwara Eliya and Kandy. She attends school. May be a reason for my son's interest in becoming a doctor.

(18) I buy what is needed for education. When I get the monthly payment I buy whatever is necessary for the child's education. The child asks for help from me and the father.

Note: Reference numbers refer to the cross-referenced ID code given to each parent and child where direct reference could be made to the individual informant.

Bhutan: mothers of rural girls and boys not attending / rural primary school boys / rural primary school girls / urban lower secondary school girls and boys (Excel spreadsheet)

Ref.No.	Grade	Interests	Parents
NoSch-18-ama	0	likes to roam around and farming	farmers
NoSch-21-ama	0	washing clothes and cooking (doesn't know anythings she said)	farmer / prayers
NoSch-22-ama	0	don't have money to go here and there - would like to go to Wangdue	farmer / gomchen
NoSch-23-ama	0	no interests because no money to go anywhere	farmer
PhPS-12-b	6	cleaning the prayer room / study / play games - ball and kuru	Kueney/farmer
PhPS-13-b	6	studying and roaming to Gantey / playing karum	farmer / weaving
PhPS-14-b	4	studying and fetching water	farming/cooking
PhPS-1-b	6	collecting firewood and water	farmers
PhPS-2-b	6	helping parents fetch water and looking after the cattle	farmers
PhPS-3-b	5	studying Dzongkha, football & volleball	farmers
PhPS-15-g	5	collects firewood after school / volleyball	taxi driver
PhPS-16-g	5	playing basketball and football	gomchen
PhPS-17-g	4	playing volleyball, football and skipping	carpenter
PhPS-4-g	6	studying - social studies	farmers
PhPS-5-g	6	studying - maths	farmers
PhPS-6-g	5	looking after little sister and helping parents	farmers
ZilLSS-71-b	7	likes painting, drawing and carving	farmers
ZilLSS-72-b	7	likes listening and playing music and singing	farmers
ZilLSS-73-b	7	likes playing football	driver
ZilLSS-62-g	7	Dzongkha dance	farmers
ZilLSS-63-g	7	likes telling jokes	both expired
ZilLSS-64-g	7	Bhutanese dancing	silversmith

Note: Reference numbers refer to individual informant coding including learner category, ID number and individual identity.

NoSch = non-attender
PhPS = name of primary school
ZilSS = name of secondary school

g = girl
b = boy
ama = mother

Annex 15 Triangulation: Secondary Informants, Children and Parents

Examples of responses from three informant groups on the same topic – the local employer, school non-attenders and the parents of school non-attenders.

Secondary Informant VI
Location: Harasbada
Date: 13-03-04
Sample: (pm) Tea Estate Manager
Selection: Employer located in Harasbada

Qu. What is it important for children to learn at home?

They must learn to live in society; they must learn discipline and cleanliness.
There is too much dependence – they even depend on the estate to sweep and clean the drains.
The new generation would like to have a nice home and to send their family away for more income eg migrant workers.
We need to increase peoples status and self esteem. We have to change the dignity of the job. Some youth may choose to do a more degrading job such as factory work but plantation labourer is given low esteem. Different terminology could be used and a uniform could be given to raise the status.

Main Sample Group V
Location: Ratnayake Patana School
Date: 11-03-04
Sample: (am) Girls and Boys aged 12-16 yrs not attending school
Selection: Drop out children who could be located by the school principal

Qu.1 Where do we learn, who from and what are the most important things we learn at home and in the community?

We can learn from school, from the environment, from Sunday school, from friends
We learn from parents by asking them and we watch how they work.
By working together we can learn things like cutting a drain

Qu.1.1 Things we learn at home: brainstorm / flipchart		
Growing flowers – preparation of the flower bed	From parents	child
Farming	We watch parents and learn	Child/adult
Spraying and using manure – measuring exactly (R06)		Adult
Cooking (all but R06 can cook)		Child
Cleaning the house – the surroundings inside and out – the home environment		Child
Dressmaking	We can look at how mother does the dressmaking and learn (R04)	Older ch. / adult
Learn how to measure the insecticides from the tank		Adult

We learn how to speak to the elders		Child
We learn what is good and what is bad		Child
House construction	Fathers build houses we can look and learn from them	Older ch. / adult

Main Sample Group VI
Location: Ratnayake Patana School
Date: 11-03-04
Sample: (pm) MOTHERS and a FATHER of 12-16 year old girls and boys not attending school
Selection: Mothers and a father of Group V

Qu.1 How do we learn?
We learn from parents, from work, and from the news we learn about our country.

Qu.1.1 What things do we learn at home?
- household work
- cooking
- sewing / stitching
- how to be with friends and relatives
- how to speak to people
- I used to go to work with parents and learned how to make flower beds, drains, etc.

(Rm02) My parents had a sewing machine but we couldn't use it and we had to sell it to get some money.

We also learned from the neighbours.

There are still many things we can learn from the community.

(Rm02) We could not get as much income as our parents did. So we joined the estate (*Note: another reason for giving up self-employment*)

(Rf03) I learned to work in the forest. Work in the forest is not continuous so I do labour work in farms.

Annex 16 Example of Transcription, Simultaneous Translation Notes and Charts

Translations of all tape recorded discussions can be compared with

Example 1. 14 year old girls attending Grade VII, urban Lower Secondary School, Bhutan

9a. SCHOOL ATTENDERS QUESTIONS

What will you choose to do and why?
Do you have a choice?
What kinds of learning do you think will be important in what you want to be able to do in future?

Transcription	Simultaneous Translation Notes
If not the above (*aspirations to be a teacher, doctor, etc*) then what will you do?	
Weave at home Farming	If I can't be a teacher the alternative is to stay at home and weave or go into farming as well.
If you have to come back to the village?	
No problem – we can do it. I wouldn't mind	*Ch. very positive that they can do it as an option.*
We can make money by selling vegetables	We can earn money from selling vegetables.

11. In what ways can mothers and fathers be involved in their child's learning?

FOR SCHOOL ATTENDERS ONLY - TUITION
- Do you attend tuition?
- How much time, how valuable is it (for passing exams, for learning things which are included as important)?

Mothers and fathers involvement in children's learning	Parents can help financially. They can give advice and counsel us not just scold us but explain nicely.
Financial help	They teach us to go with good friends and to keep good company.
Advice / counselling (eg. to keep good company)	*All the children talk with the main person at home who is the child carer / parent about what they are doing at school. All parents have some education.*
Discuss what the children learn in school	Parents give us encouragement for the future.
(better if parents / guardians know how to read and write)	

Example 2. Aunt of 14 year old orphan girl attending Grade VII, urban Lower Secondary School, Bhutan, acting in loco parentis

QU. Is life better in the village or in the town?	
Life is better in the village because there I can pray.	I prefer the village where I can pray. My daughter is an anim (nun). She has been meditating in the village for almost 3 years.
What expectations do you have for your niece (Pema D):	
I hope she can study well and be able to look after herself when she grows up since she is an orphan	Hoping Pema D will be able to study well and look after herself because she parents. We are hoping she can look after herself.
What would Pema D like to do?	
No idea. Pema D doesnt say. She has already lost a few years due to parents death.	They don't know what she could do or what she is interested in. *She lost some years of school because of losing parents and there is no one to look after her. She is about 18 yrs old*
What jobs can girls of Pema D's age do in the local area?	
No idea because we are uneducated so we don't know. (*being uneducated Pema D's aunt said*)	We don't know what others have done after school around here as we are not educated ourselves (*they said this*)
	NOTE: what are the strengths of extended family? - opportunity / care - vulnerability / losing tradition and subsistence living

Chart 3. Learning at home, at school, in the community and with friends / age of learning and ranking of importance – 14 year old boys attending school, rural Sri Lanka

The focus group discussion was recorded using the chart below (English version of the Sinhala Chart photo-image used in the Focus Group Discussion) to structure the discussion. The chart shows the outcome of discussion about what is important to learn in the home and at school.

Chart 3a. English translation of Focus Group Discussion - Sinhala Chart 14 Year Old Boys Attending School, Rural Sri Lanka

rank	Learning at home	5-10	10-14	14-18	rank	Learning at school	5-10	10-14	14-18
	- to speak	✓				- good and bad	✓		
3	- good and bad		✓		2	- living in peace	✓		
2	- respect the elders	✓				together			
1	- behaviour	✓				- how to be in	✓		
4	- helping with					meetings			
	household work		✓			- to work in groups		✓	
	- cultivation		✓		1	- to be clear	✓		
	- carpentry and			✓		- learn to read and	✓		
	masonry					write			
						- how to face exams			✓
						- different types of			✓
						experiments			
	Learning in the community					Learning with friends			
1	- to behave in the		✓	✓	2	- understanding what		✓	
	community					is good and bad			
	- understanding		✓	✓	1	- friendship	✓		
	members of the				3	- learning to win and		✓	
	community					lose in games			
2	- good and bad	✓							
3	- proper words to be	✓							
	used								

Annex 17 The Constitution of the Kingdom of Bhutan

Article 9 Principles of State Policy

15. The State shall endeavour to provide education for the purpose of improving and increasing knowledge, values and skills of the entire population with education being directed towards the full development of the human personality

16. The State shall provide free education for all children of school going age up to tenth standard and ensure that technical and professional education is made generally available and that higher education is equally accessible to all on the basis of merit

(Royal Government of Bhutan, 2005)

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